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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

<p>DREAM BIG MEDIA, INC., GETIFY SOLUTIONS, INC., and SPRINTER SUPPLIER LLC, Individually and on Behalf of all Others Similarly Situated,</p> <p>Plaintiffs,</p> <p>vs.</p> <p>ALPHABET INC. and GOOGLE LLC,</p> <p>Defendants.</p>	<p>Case No. 3:22-cv-02314-RS</p> <p><u>CLASS ACTION</u></p> <p>SECOND AMENDED COMPLAINT FOR VIOLATIONS OF THE U.S. SHERMAN ANTITRUST ACT, U.S. CLAYTON ANTITRUST ACT, AND CALIFORNIA STATE LAW</p> <p><u>DEMAND FOR JURY TRIAL</u></p>
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1 Plaintiffs Dream Big Media, Inc., Getify Solutions, Inc., and Sprinter Supplier LLC,
 2 individually and on behalf of all others similarly situated (“Class,” which is further defined below),
 3 by and through Plaintiffs’ undersigned counsel, upon personal knowledge as to facts known to
 4 Plaintiffs and upon information and belief as to all other facts following investigation of counsel,
 5 for Plaintiffs’ Second Amended Class Action Complaint for Violations of the U.S. Sherman
 6 Antitrust Act (“Sherman Act”), U.S. Clayton Antitrust Act (“Clayton Act”), and California Unfair
 7 Competition Law, against Defendants Alphabet Inc. (“Alphabet”) and Google LLC (together with
 8 Alphabet, “Google” or “Defendants”), allege the following.

9 **I. NATURE OF THE ACTION**

10 1. Alphabet and Google have improperly restricted Plaintiffs and the Class from
 11 purchasing competing digital-mapping products, specifically application (“app”) programming
 12 interfaces (“APIs”), a way for two or more computer programs to communicate and exchange
 13 data, forcing Plaintiffs and the Class to purchase or expend monetary credits for only Google’s
 14 products, which Defendants provide through the Google Maps brand.

15 2. The Class, consisting of purchasers of these products—including businesses,
 16 developers, and individuals who purchase digital-mapping products—are hurt by these
 17 restrictions, implemented, in part, through Google Maps’ terms of service (“Terms of Service”
 18 or “TOS”), because Defendants force Class members to pay inflated prices for digital-mapping
 19 products (among other anticompetitive harm) or are not able to take advantage of competitors’
 20 digital-mapping products.

21 3. Defendants’ restrictions constitute antitrust misconduct, specifically negative
 22 tying (forbidding access to competitors’ places APIs or routes APIs, once they purchase
 23 Google’s Maps APIs), exclusive dealing (forcing Plaintiffs and the Class to purchase only
 24 Google’s Maps APIs, Places APIs, and Routes APIs), self-preferencing (by excluding direct
 25 competitors of Google Maps in the relevant antitrust products markets and degrading the digital-
 26 mapping products that Google sells to Plaintiffs and the Class), and, in totality, monopolization
 27 (or, in the alternative or at the least, attempted monopolization).

1 4. These restrictions affect digital mapping products in three distinct relevant
 2 antitrust products markets, the geographical component of all three of which is the United States
 3 of America, including, without limitation, all of the states, the District of Columbia, and the
 4 territories.

5 5. These are the markets for:

- 6 (i) APIs that retrieve and display a digital map (the “Digital Maps API Market,” the
 7 products in this market are “maps APIs”);
- 8 (ii) APIs that retrieve and display information on a digital map about establishments,
 9 locations, and other points-of-interest (the “Digital Places API Market,” the
 10 products in this market are “places APIs”); and
- 11 (iii) APIs that retrieve and display navigational information, such as directions,
 12 navigation, and travel time, on a digital map (the “Digital Routes API Market,”
 13 the products in this market are “routes APIs”).

14 6. Google recognizes these separate markets and groups its API products into
 15 categories that it even calls Maps APIs, Places APIs, and Routes APIs—the capitalized terms
 16 used herein refer to Google Maps’ APIs, while the uncapitalized terms herein refer to
 17 competitors’ APIs.

18 7. Each of these product categories include related products with sub-features that
 19 support the same, overarching purpose of each product category; for instance, Google’s Maps
 20 APIs include, without limitation, the Maps Static API (which displays a static image of a map
 21 on a webpage), the Maps JavaScript API (which displays an interactive map on a webpage), and
 22 the Maps SDK for iOS (which displays an interactive map on an application on a device made
 23 by Apple which runs Apple’s iOS operating system).

24 8. Pursuant to the Court’s Order in this Action on November 30, 2023 (ECF No. 67,
 25 at 5-8), Plaintiffs will focus the negative tying claim on Google Maps using its Maps APIs as
 26 the tying product, and its Places APIs and Routes APIs as the negatively tied products.

27 9. For most Plaintiffs and the Class, the initial digital-mapping API to form the base

1 of a digital map are maps APIs. Google's Maps APIs thus are alleged to be the tying product.
 2 The overwhelmingly dominant provider in the Digital Maps API Market is Google Maps, with
 3 above 90% market share. Plaintiffs and the Class cannot feasibly avoid Google's Maps APIs in
 4 totality because of Google Maps' alleged monopoly share of above 90%, the barriers to entry
 5 (that Google, in part, helped erect) that keep existing competitors and potential new ones at bay,
 6 and the sheer data advantage that Google has, especially in connection with its Maps APIs,
 7 considering, for example, the cross-app data sharing within the panoply of Google's other apps
 8 and tools, and with Google Maps being a default app on Android mobile phones, which gives
 9 Google Maps an additional advantage over competitors.

10 10. Google uses its monopoly power (or, in the alternative and at the least, sufficient
 11 market or economic power) in the Digital Maps API Market to impose the TOS, coercion, and
 12 other alleged anticompetitive activity to prevent Plaintiffs and Class members from purchasing
 13 or using competitors' places APIs or routes APIs, if they purchase Google's Maps APIs.

14 11. Google Maps' Terms of Service, its coercive enforcement, and its monopoly
 15 power (or in the alternative and at the least, sufficient market or economic power) effectuates a
 16 system where once Plaintiffs and Class members purchase or expend monetary credits on Maps
 17 APIs, they cannot purchase, expend monetary credits, or otherwise use or link places APIs nor
 18 routes APIs from competitors. If Plaintiffs and Class members prefer to use or link places APIs
 19 or routes APIs from competitors, they cannot, and they are then forced to purchase or expend
 20 monetary credits on unwanted Places APIs or Routes APIs from Google Maps.

21 12. Defendants' language in the Google Maps Terms of Service, monopoly power,
 22 and anticompetitive misconduct is so great in the Digital Maps API Market that Google's Maps
 23 APIs are the tying product, with one or both of Google's Places APIs or Routes APIs being the
 24 negatively tied products.

25 13. Plaintiffs and Class members purchase and expend monetary credits for maps
 26 APIs, places APIs, and routes APIs to be used and linked together to create one digital map on
 27 one digital screen, whether it be an app or website. There is sufficient demand from Plaintiffs
 28

1 and Class members to purchase or expend monetary credits for Google's Maps APIs and for
 2 places APIs and routes APIs from other competitors—not just Google Maps—to use and link
 3 together on one digital screen on one app or website.

4 14. Google Maps and competitors recognize this by offering maps APIs, places APIs,
 5 or routes APIs individually. It makes neither economic nor practical sense—in terms of money,
 6 time, effort, and digital real estate—for Plaintiffs and Class members to use or link one digital
 7 map containing only Google's Maps APIs on one digital screen, whether an app or website, and
 8 then also use an entirely separate and unlinked digital map containing places APIs or routes
 9 APIs only from a separate competitor on a separate and unlinked digital screen, whether on an
 10 app or website.

11 15. Indeed, customers or potential customers of Plaintiffs and Class members would
 12 not appreciate routing to such entirely separate and unlinked displays of digital maps on separate
 13 and unlinked apps or websites: should they be routed to an entirely separate and unlinked digital
 14 map to view maps APIs, places APIs, or routes APIs, they will lose attention, lose interest,
 15 potentially abandon the process, and ultimately not continue with patronage of Plaintiffs and
 16 Class members' businesses.

17 16. But Defendants and Google Maps' anticompetitive schemes alleged herein make
 18 it forbidden from a contractual perspective, and infeasible from an economic perspective, for
 19 Plaintiffs and Class members to purchase or expend monetary credits for Google's Maps APIs
 20 and then also purchase or expend monetary credits for places APIs or routes APIs from any
 21 competitor, despite preferences to use competitors' places APIs or routes APIs.

22 17. There are competitors to Google Maps that offer places APIs and routes APIs of
 23 comparable, if not better, quality and which are materially cheaper, if not free. Google Maps is
 24 notoriously known to be the most expensive provider. But Defendants' anticompetitive actions
 25 have cut off the air supply of existing competitors, whose market shares combined are alleged
 26 to be weak and minuscule, compared to Google Maps' monopolistic market share of over 90%
 27 in the Digital Maps API Market.

1 18. Defendants have been using, revising, and enforcing Google Maps' Terms of
 2 Service to prohibit Plaintiffs and Class members from using any of Google's Maps APIs with
 3 competitors' places APIs or routes APIs—indeed, Google Maps' TOS prohibit Plaintiffs and
 4 Class members from using any of Google's Maps APIs, Places APIs, or Routes APIs with any
 5 of competitors' maps APIs, places APIs, or routes APIs.

6 19. According to the U.S. House of Representatives Subcommittee on Antitrust,
 7 Commercial and Administrative Law of the Committee on the Judiciary (the "House Antitrust
 8 Subcommittee") in a report described in detail below, "*version[s] of [the terms of service]*
 9 *provision prohibit* developers from using *any* component of the Google Maps Core Service with
 10 mapping services provided by non-Google firms. The April 2020 change to the terms of service
 11 *is even more restrictive: it prohibits developers from even displaying any component of Google*
 12 *Maps 'near' any other map.*"²

13 20. Among other harms, Google's alleged unlawful anticompetitive actions mean that
 14 competitors cannot compete based on individual features, even those crucial to the individual
 15 markets. For instance, a purchaser may prefer the directions provided by TomTom's routes
 16 APIs. But if that Class member wishes to access Google's Maps APIs, they are locked into using
 17 and paying for Google's Maps API and Google's Routes API products as well—and *only*
 18 Google's APIs, neither places APIs nor routes APIs from any competitor.

19 21. Similarly, a restaurant that purchases Google's Maps API but wants to display
 20 reviews from a competitor's places APIs cannot purchase and use the competitor's places APIs.
 21 The Class member who wants to use reviews on its digital map are locked into Google's Places
 22 APIs as well, and *only* Google's APIs.

23 22. As another example of the anticompetitive results of Google's misuse of its
 24 monopoly power, Google even prevents users from displaying their *own* data on a digital map
 25 created with Google's Maps APIs. For instance, a developer who had its own review data

28 2 All emphasis is added herein, unless stated otherwise.

1 (constituting a places API) that it wished to use and link on a digital map using Google's Maps
 2 APIs is prohibited from doing so. Instead, the developer seeking that functionality would be
 3 required to *either* use a Google's Places APIs instead of their own, *or* the developer must forego
 4 using a places API entirely, blocking the business from having access to the preferable and most
 5 detailed business information.

6 23. While added coercion is not necessary to establish this kind of negative tying
 7 claim, because the negative tying term is in writing in the TOS and Google has monopoly power
 8 (and certainly sufficient economic or market power) in the tying product (Google's Maps APIs),
 9 coercion is alleged here. The House Antitrust Subcommittee on October 6, 2020, issued a
 10 Majority Staff Report and Recommendations which it entitled "Investigation of Competition in
 11 Digital Markets" (the "House Antitrust Report"). It was based on thousands of hours of
 12 interviews, more than a million pages of documents, and submissions from 60 antitrust experts.
 13 This report, discussed in much more detail below, shows how coercive Defendants have been
 14 in their antitrust misconduct.

15 24. According to the House Antitrust Report, discussed below, "developers choose to
 16 mix and match, using map data from one firm but places data from another." However,
 17 according to the House Antitrust Report, "Google . . . prohibits developers from using any part
 18 of its mapping tools alongside any non-Google mapping features." Several developers using
 19 Google Maps have told the House Antitrust Subcommittee that Google imposed anticompetitive
 20 restrictions as it gained a more-dominant market position.

21 25. Indeed, Google has ratcheted up its prohibitions against app developers. The
 22 House Antitrust Report noted that while the restriction was in the Google Maps terms of
 23 service for several years, in April 2020, Google amended the terms of service language to make
 24 the restrictions even more exclusionary, while adding pretextual language to attempt to try
 25 justifying the anticompetitive restrictions in an unpersuasive manner.

26 26. The House Antitrust Report documented how Google's "aggressive" enforcement
 27 of its negative tying provisions had led "several major companies" to switch "entirely" to
 28

1 Google's so-called ecosystem, despite preferring to purchase digital-mapping APIs from
 2 competitors. In addition to the Terms of Service effectuating a negative tie, the House Antitrust
 3 Report noted several instances of coercion, noting that these terms result in exclusive dealing:
 4 "In practice, Google's contractual provision has led several major companies to switch entirely
 5 to Google's ecosystem, even in cases where they preferred mapping services from a non-Google
 6 provider, such as Mapbox."

7 27. Each of Plaintiffs Dream, Getify, and Sprinter experienced damages, including,
 8 without limitation, from negative tying, exclusive dealing, self-preferencing, and
 9 monopolization (or in the alternative and at the least, attempted monopolization), as did the
 10 several cited developers in the House Antitrust Report, and as described further by the antitrust
 11 investigations of the U.S. Department of Justice, Antitrust Division (DOJ-Antitrust), and
 12 German Federal Cartel Office (Bundeskartellamt, "GFCO").

13 28. The anticompetitive ramifications of the exclusive dealing are exemplified by
 14 even behemoth companies being beholden to Google Maps, such as Lyft, Uber, and Ford. That
 15 Plaintiffs, the Class, and such massive companies face the negative tying and exclusive dealing
 16 to wall them into Google Maps' ecosystem, and Google Maps' market share of over 90% in the
 17 business-to-business segment of Google Maps providing Maps APIs to Plaintiffs and the Class,
 18 demonstrates that the exclusive dealing has substantially foreclosed competition and continues
 19 to do so.

20 29. As found in the Antitrust House Report, Defendants even make the products
 21 provided to Plaintiffs and Class Members lower quality than that which Google provides to the
 22 market directly. Google Maps uses self-preferencing for map caching to benefit its own
 23 businesses and operations, and to the detriment of digital-mapping providers that compete
 24 directly with Google Maps in the Digital Maps API Market, Digital Places API Market, and
 25 Digital Routes API Market, who use Google's Maps APIs, Places APIs, or Routes APIs as inputs
 26 in their own products that compete with Google Maps. And Defendants use self-preferencing
 27 for map caching to jack-up costs for Plaintiffs and Class members and degrade the quality of
 28

1 Plaintiffs and Class members' experience with Maps APIs, Places APIs, or Routes APIs.

2 30. The House Antitrust Report also documented how Google's monopoly provided
 3 it with a "trove of data" that, combined with Google's negative tying policies, served to make
 4 its position in digital mapping API products unassailable. In fact, there have been no meaningful
 5 new competitors in the Digital Maps APIs, Digital Routes APIs, or Digital Places APIs Markets
 6 since at least 2013—a serious anticompetitive result of Defendants' antitrust misconduct. As
 7 one firm put it to the House subcommittee, succinctly summarizing the antitrust misconduct:
 8 "It's a bigger player putting a gun to our head saying 'switch [to Google's products] or else.'

9 31. Under *per se* liability, as alleged here, whether the purported procompetitive
 10 effects of this misconduct outweigh any anticompetitive effects is irrelevant. Moreover,
 11 Defendants' potential defenses of a supposedly procompetitive explanation of its misconduct of
 12 avoiding "quality issues and/or brand confusion" are not justified—there is no brand confusion
 13 (developers are sophisticated and can easily display the sources of maps APIs, places APIs, and
 14 routes APIs on their apps or websites). And quality is more inferior than it would have been
 15 without this misconduct: even with an ever-increasing stranglehold over the Digital Maps API
 16 Market, Digital Routes API Market, and Digital Places API Market, Google Maps with its strict
 17 control has recklessly or intentionally done a poor job of maintaining quality and accurate
 18 business-mapping features.

19 32. Google Maps has monopoly power (or in the alternative and at the least, sufficient
 20 market or economic power) in the Digital Maps API Market.

21 33. And Plaintiffs throughout this complaint allege facts concerning direct evidence
 22 of monopoly power.

23 34. Due to this antitrust misconduct, for years, Defendants have been able to (i)
 24 impose supracompetitive prices, (ii) impose byzantine terms effectuating negative tying,
 25 exclusive dealing, and self-preferencing caching, (iii) offer digital-mapping that is incomplete,
 26 riddled with errors, and crashes, and (iv) allegedly commit serious data-privacy violations in
 27 connection with location data, including, without limitation, data collected through Google
 28

1 Maps.

2 35. And Defendants have done all of this while Google Maps has been able to
 3 strengthen its financial strength and growth throughout the Class Period. But for the
 4 anticompetitive practices alleged herein—negative tying, exclusive dealing, self-preferencing,
 5 and monopolization—there would have been more meaningful competition from existing
 6 competitors in the Digital Maps API Market, Digital Places API Market, and Digital Routes API
 7 Market. Such increased competition would have reined in Defendants’ supracompetitive prices,
 8 byzantine, coercive, and anticompetitive terms, lower quality, and data-privacy violations.

9 36. Evidence of this monopoly comes not only from the findings in the House
 10 Antitrust Report; analysis of industry participants and analysts’ websites and Plaintiffs Dream,
 11 Getify, and Sprinter’s experiences as direct purchasers are consistent with such allegations.

12 37. The House Antitrust Report found that in the “business-to-business” segment,
 13 which Plaintiffs allege and define as that concerning Google Maps and its competitors supplying
 14 APIs to Plaintiffs and Class members, Google Maps has over 90% market share in the Digital
 15 Maps API Market: “*Google Maps API captures over 90% of the business-to-business*
 16 *market[J]*” And read in totality and in context, in the indirectly relevant “turn-by-turn
 17 navigation” segment referring to the independent tools of personal, consumer navigation,
 18 Defendants have a market share above 80%, supporting Plaintiffs’ directly relevant allegations
 19 of Google Maps’ monopoly market share of over 90% in the Digital Maps API Market.

20 38. The combined market share of competitors in the Digital Maps API Market is
 21 dwindling and anemic compared to Google Maps’ above-90% market share. None of these
 22 competitors have made a dent in Google Maps’ above-90% market share in the Digital Maps
 23 API Market, even despite Google’s alleged direct demonstrations of market power alleged for
 24 years.

25 39. Google’s monopoly power is durable due to extremely high barriers to entry
 26 erected, in part, by Defendants. The barriers to entering the relevant antitrust products markets
 27 are so high because of high fixed costs, network effects, lock in, switching costs, access to data,
 28

1 market tipping, and Defendants' anticompetitive activity, all of which shackles Plaintiffs and
 2 Class members, exclude competitors, and threaten innovation.

3 40. It is not the control, use, or design of the Maps APIs already purchased or
 4 monetary-credit expended from Google Maps that is the true goal of the negative tying in
 5 Google's Terms of Service; instead, Defendants' goal is forcing Plaintiffs and Class members
 6 to purchase or expend monetary credits for Google's Places APIs or Routes APIs, which
 7 Plaintiffs and Class members otherwise would purchase from competitors, or forcing Plaintiffs
 8 and Class members to **not** purchase those additional places APIs or routes APIs from
 9 competitors at all.

10 41. This antitrust misconduct causes enormous damage to Plaintiffs and Class
 11 members. The House Antitrust Report documented how Google in some cases has increased
 12 prices by as much as 1,400% in recent years, making plain that Plaintiffs and Class members
 13 are paying massively for Google's misuse of market power and antitrust misconduct.

14 42. Each of Plaintiffs Dream, Getify, and Sprinter were damaged by the alleged
 15 anticompetitive actions, including, without limitation, through unwanted purchases and
 16 monetary credit expenditure.

17 43. Based on the House Antitrust Report, Google's own admissions, the Google Maps
 18 Terms of Service, testimony from industry participants, monopoly power, coercion,
 19 practicalities and economics of the relevant antitrust products markets, the DOJ-Antitrust and
 20 GFCO investigations directly related to the allegations herein, and, of course, Plaintiffs' own
 21 experiences, Plaintiffs allege that Google engaged in negative tying and exclusive dealing in
 22 violation of Sections 1 and 3 of the Sherman Act (15 U.S.C. §§1, 3) and Section 3 of the Clayton
 23 Act (15 U.S.C. §14). Google's misconduct in totality with self-preferencing is unlawful
 24 monopolization maintenance (or in the alternative and at the least, attempted monopolization)
 25 in violation of Section 2 of the Sherman Act (15 U.S.C. §2). On behalf of themselves and the
 26 Class, Plaintiffs seek damages and equitable, injunctive, and declarative relief under Sections 4
 27 and 16 of the Clayton Act (15 U.S.C. §§ 15, 26). All such conduct violates the California Unfair
 28

1 Competition Law (Cal. Bus. & Prof. Code §§ 17200, *et seq.*).

2 **II. PARTIES**

3 **A. Plaintiffs**

4 44. Plaintiff Dream Big Media, Inc. (“Dream”) is a California corporation with a
5 principal place of business in California.

6 45. Plaintiff Getify Solutions, Inc. (“Getify”) is a Texas corporation with a principal
7 place of business in Texas. Getify developed a website and application called “RestaurNote”
8 that allows users to track their dining histories.

9 46. Plaintiff Sprinter Supplier LLC (“Sprinter”) is a Pennsylvania limited liability
10 company with a principal place of business in Pennsylvania. Sprinter is an e-commerce
11 automotive parts company that makes use of digital mapping products, in order to help local
12 customers find its business.

13 **B. Defendants**

14 47. Defendant Alphabet Inc. is a Delaware corporation with its principal place of
15 business at 1600 Amphitheatre Parkway, Mountain View, California 94043. Alphabet wholly
16 owns and controls Google LLC, and Alphabet is the alter ego of Google LLC and Waze. Google
17 LLC and Waze direct all profit to and report revenue through Alphabet.

18 48. Defendant Google LLC is a Delaware limited liability company with its principal
19 place of business at 1600 Amphitheatre Parkway, Mountain View, California 94043. Google is
20 a wholly owned and controlled subsidiary of XXVI Holding Inc., which is a subsidiary of
21 Alphabet. Since 2005, Google has wholly owned and controlled Google Maps, the division and
22 brand through which Defendants provide Google’s Maps APIs, Places APIs, and Routes APIs.
23 Since 2013, Google has wholly owned and controlled Waze. Google is the alter ego and agent
24 of Alphabet and Waze, and the companies regularly combine and comingle their operations.

25 49. All Defendants are engaged in substantial interstate commerce. Each Defendant
26 deals with and earns revenues and profits from websites and application developers and other
27 users throughout the United States.

III. JURISDICTION AND VENUE

50. This class action arises under Sections 1, 2, and 3 of the Sherman Act, 15 U.S.C. §§ 1, 2, and 3, and under the Clayton Act, 15 U.S.C. §§ 12, 15-16, and 26.

51. This Court has subject matter jurisdiction over the Sherman Act claims pursuant to 28 U.S.C. §§ 1331, 1332(d), and 1337, and Clayton Act Sections 4 and 16, 15 U.S.C. §§ 15, 26. And this Court has supplemental jurisdiction over Plaintiffs' state law claims pursuant to 28 U.S.C. § 1337(a).

52. This Court has personal jurisdiction over Defendants, which maintain their headquarters and places of business in California.

53. Venue is proper in this District pursuant to Clayton Act Sections 4, 12, and 16, 15 U.S.C. §§ 15, 22, and 26, and 28 U.S.C. § 1391(b), (c), and (d). All Defendants reside, transact business, are found, and have agents in this District.

54. Pursuant to the Google Maps Terms of Service, venue and personal jurisdiction is consented to in this District.

55. Defendants' acts were within the flow of, were intended to have, and did in fact have a substantial effect on the interstate commerce of the United States.

56. Defendants used the instrumentalities of interstate commerce to effectuate the alleged unlawful schemes, including, without limitation, interstate railroads, highways, waterways, airways, cable, wires, wireless spectrum, and the U.S. mail.

IV. STATEMENT OF FACTS

A. Introduction

57. Digital mapping provides virtual maps of the physical world and other data to users, whether they are direct users, such as Plaintiffs and Class members, or indirect users, such as individuals who view Plaintiffs and Class members' apps or websites.

58. With the proliferation of online commerce and smart devices, digital mapping has become a critical and ubiquitous product for businesses and users alike. Financial analysts have described digital mapping as a product that businesses and users cannot do without.

1 59. An API is a way for Plaintiffs and Class members to have their apps, websites, or
 2 other types of operations (such as back-office operations) call, interface, or otherwise receive
 3 data from a supplying business, such as from digital-mapping data housed in Google's data
 4 library or the library of one of its competitors. APIs are a set of definitions, intermediaries,
 5 mechanisms, and protocols for building and integrating data and software between two apps.

6 60. APIs are an accessible way to extract and share data within and across
 7 organizations. APIs are treated more like products than code.

8 **B. Relevant Antitrust Product Markets**

9 61. In terms of a direct user's app or website, digital-mapping APIs generally (and
 10 maps APIs specifically) enable them to create a digital map and use, link, and display it on their
 11 own app or website. Digital-mapping APIs are also integral parts of logistics software or back-
 12 office digital programming for companies that depend on location planning—for example, route
 13 planning in a transportation-management system that needs to plan complex routes, locate assets
 14 precisely and frequently, manage and operate thousands of assets at scale, understand real-time
 15 road conditions, and gaming. And places APIs then provide a host of data about particular
 16 locations, such as opening hours, reviews, whether a location provides Wi-Fi, and much more.

17 62. APIs provide an accessible way to extract and share data within and across
 18 organizations. While, like apps, APIs are comprised of code, APIs constitute distinct products.

19 63. Indeed, Defendants (through counsel) have conceded—consistently with how
 20 Google Maps offers digital-mapping APIs—that Google Maps' digital-mapping APIs are
 21 separately available and may be purchased individually.³

22 64. The relevant separate antitrust products markets are the Digital Maps API Market,
 23 Digital Routes API Market, and Digital Places API Market. They are not one product nor one
 24 market: they are distinct products markets.

25 65. Google itself recognizes these distinct markets on its website and webpages (and

27 28 ³ See, e.g., *Dream Big Media, Inc., et al., v. Alphabet, Inc., et al.*, No. 3:22-cv-02314 (JSW) (N.D. Cal.), Defs.' Mot. to Dismiss, at 6, July 12, 2022, ECF No. 29 ("Defs.' MTD Comp.").

1 did so during the Class Period, as defined below), listing APIs—designated as “Products”—
 2 offered as part of the “Google Maps Platform,” broken into distinct categories of Google’s Maps
 3 APIs, Google’s Places APIs, and Google’s Routes APIs, and has distinguished them in terms of
 4 pricing and uses.

5 *The Digital Maps API Market Is a Relevant Antitrust Product Market*

6 66. The geographic component of the Digital Maps API Market is throughout the
 7 United States, including the states, the District of Columbia, and the territories.

8 67. Maps APIs have distinct prices, pricing sensitivities, uses, and qualities, and
 9 products without these characteristics are not reasonably interchangeable for maps APIs. There
 10 are no reasonable substitutes.

11 68. Maps APIs are used by Plaintiffs and Class members to create, use, and link a
 12 digital map on their apps or websites. Maps APIs retrieve data concerning maps, images, and
 13 terrain data.

14 69. Distinct qualities of maps APIs include the following: a static (non-interactive)
 15 street view panorama or thumbnail; an interactive map or street view panorama; dynamic,
 16 interactive, and customized maps, locations, and geospatial experiences; features that respond
 17 to user interactions and gestures, such as clicks and drags; and roadmap, satellite, hybrid, or
 18 terrain images that can be customized with content and imagery and modified using layers and
 19 styles, controls and events, and other data. These examples of particular characteristics and uses
 20 demonstrate the distinct core functionality of maps APIs, for which there are no products that
 21 are reasonably interchangeable for the same purposes.

22 70. Although competitors and Google Maps may use different names for the specific
 23 APIs that are part of the Digital Maps API Market, and those APIs may have sub-features, they
 24 are all used for the same, overarching purpose of displaying digital maps, images, and terrain
 25 data on apps or websites, and Plaintiffs thus allege them as the Digital Maps API Market.

26 71. As examples and for context, Google’s types of Maps APIs offered during the
 27 Class Period are listed below.

1 72. The Maps Static API enables Plaintiffs and Class members to embed maps images
2 on an app or website.

3 73. The Street View Static API enables Plaintiffs and Class members to embed a static
4 (non-interactive) Street View panorama or thumbnail on a website.

5 74. The Maps Embed API enables Plaintiffs and Class members to place an
6 interactive map or street view panorama on an app or website.

7 75. The Maps SDK for Android enables Plaintiffs and Class members to build
8 dynamic, interactive, and customized maps, locations, and geospatial experiences for an
9 Android app, using maps data, maps displays, and maps gesture responses. Using this product,
10 Plaintiffs and Class members can also provide additional information for map locations and
11 support user interaction by adding markers, polygons, and overlays to a digital map.

12 76. The Maps SDK for iOS enables Plaintiffs and Class members to add maps data to
13 their apps. The SDK automatically handles access to servers, map displays, and responds to user
14 gestures, such as clicks and drags. A user can add markers, polylines, ground overlays, and
15 information windows to a digital map. These objects provide additional information for map
16 locations and allow user interaction with a map.

17 77. The Maps JavaScript API lets Plaintiffs and Class members to customize content
18 and imagery for display on digital maps on websites and mobile devices. This API features four
19 basic map types—roadmap, satellite, hybrid, or terrain—that can be modified using layers and
20 styles, controls and events, and other data.

21 78. These examples of particular characteristics and uses demonstrate the distinct core
22 functionality of maps APIs, for which there are no products that are reasonably interchangeable
23 for the same purposes. Plaintiffs and Class members have no economic substitutes for maps
24 APIs. There are no products roughly equivalent for the uses to which maps APIs are put.

25 79. Maps APIs have distinct pricing and pricing sensitivities.

26 80. There is no cross-elasticity of demand between maps APIs and any purported
27 reasonable substitutes (there are none).

1 81. Plaintiffs and Class members would not switch to reasonable alternatives (there
 2 are none) in response to price increases.

3 82. Indeed, the across-the-board, drastic price increases in the middle of 2018 by
 4 Google—examples of which are alleged to have reached magnitudes of 1,400%—and
 5 corresponding reduction of the value of the monetary credits did not result in Plaintiffs or Class
 6 members being able to shift demand to reasonable substitutes for maps APIs because there are
 7 no alternatives that have characteristics and uses reasonably interchangeable for the distinct core
 8 functionality of maps APIs.

9 83. Plaintiffs allege drastic price increases over several years, all without Defendants’
 10 dominance in maps APIs slipping—there have been no new competitors over the past several
 11 years to challenge Defendants’ dominance, and Defendant’s existing competitors have been
 12 unable to make a dent into nor challenge Google Maps’ dominance.

13 84. There is industry and public recognition of the Digital Maps APIs Market as a
 14 distinct product market.

15 85. Even Google Maps itself on its websites categorizes its Maps APIs as a distinct
 16 product group, especially in terms of pricing menus and uses. Examples of pricing during the
 17 Class Period are \$2 for 1,000 calls to Google’s Maps Static API (used to link a single map image
 18 on a web page) and \$2 for 1,000 calls to Google’s Maps JavaScript API (used to link an
 19 interactive map that a user can move around and manipulate).

20 86. Each of Plaintiffs Dream, Getify, and Sprinter recognize maps APIs as a distinct
 21 relevant product market, especially in terms of pricing and uses, and each of Plaintiffs Dream,
 22 Getify, and Sprinter do not have reasonable substitutes for maps APIs.

23 87. There are no substitutes that have characteristics and uses that are reasonably
 24 interchangeable for the distinct core functionality of maps APIs. For example, non-digital forms
 25 of mapping data are not substitutes for Plaintiffs and Class members’ use of maps APIs.
 26 Plaintiffs and Class members could not practically send a paper map to customers or potential
 27 customers visiting their apps or websites. And directing customers or potential customers to
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1 leave Plaintiffs and Class members' apps or websites to visit entirely separate apps or websites
 2 to get digital mapping data would defeat the purpose of having the customers or potential
 3 customers visit Plaintiffs or the Class members' apps or websites in the initial instances.

4 88. The ability to view maps APIs on an app or webpage is critical to the user's
 5 experience and to the likelihood of the user's patronage of Plaintiffs and Class members. If the
 6 user is required to view the maps APIs on an entirely separate app or website, that user would
 7 simply abandon the app or website or stop interacting with it altogether. Routing users to an
 8 entirely separate app or website is not a reasonable substitute.

9 *The Digital Places API Market Is a Relevant Antitrust Product Market*

10 89. The geographic component of the Digital Places API Market is throughout the
 11 United States, including the states, District of Columbia, and territories.

12 90. Places APIs have distinct prices, pricing sensitivities, uses, and qualities, and
 13 products without these characteristics are not reasonably interchangeable for places APIs. There
 14 are no reasonable substitutes.

15 91. Places APIs are used by Plaintiffs and Class members to use and link data about
 16 places on a digital map, places often being defined as establishments, geographic locations, or
 17 prominent points of interest. Places APIs enable Plaintiffs and Class members to use or link this
 18 data with digital maps on their apps or websites.

19 92. Distinct qualities of places APIs include the following: geocoding and reverse
 20 geocoding, which convert addresses into geographic latitude and longitude coordinates and the
 21 reverse; geolocation, which returns a location and accuracy radius; address validation;
 22 information about places, such as a list of places based on a user's location and search string,
 23 specific details about a place (including user reviews), place photos, place autocomplete titles
 24 in response to users' searches, and query autocomplete to predict completions of users' text
 25 searches; place finders that returns place information from broad search strings; location- and
 26 context-specific information about local places in proximity to users' locations; and time zone
 27 features. These examples of particular characteristics and uses demonstrate the distinct core
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1 functionality of places APIs, for which there are no products that are reasonably interchangeable
 2 for the same purposes.

3 93. Although competitors and Google Maps may use different names for the specific
 4 APIs that are part of the Digital Places API Market, and those APIs may have sub-features, they
 5 are all used for the same overarching purpose of retrieving and linking data about places on a
 6 digital map, and Plaintiffs thus allege them as the Digital Places API Market.

7 94. As examples and for context, Google's types of Places APIs offered during the
 8 Class Period are listed below.

9 95. A Geocoding API helps the process of converting addresses into geographic
 10 latitude and longitude coordinates, which Plaintiffs and Class members can use to place markers
 11 on a map or position a map. Reverse Geocoding is the process of converting geographic latitude
 12 and longitude coordinates into a human-readable address. Plaintiffs and Class members can use
 13 a Geocoding API to find the address for a given place identification.

14 96. The Geolocation API returns a location and accuracy radius based on information
 15 about cell towers and WiFi nodes that the mobile client can detect.

16 97. The Address Validation API accepts an address, identifies the address
 17 components, and validates them. It can standardize the address for mailing and find the best-
 18 known latitude and longitude location for it. An Address Validation API can help identify
 19 whether an address refers to a real place. If the address does not refer to a real place, it can
 20 identify possibly wrong components, enabling correction of them. The Address Validation API
 21 provides many features to help process an address: for example, it can separate the address into
 22 its individual components and provide component-level validation checks; and it can cleanse,
 23 standardizes, and infer missing or incorrect address components.

24 98. Various APIs which can be offered, for example, as an Autocomplete – Per
 25 Request API or an Autocomplete + Place Details – Per Session API, can return information
 26 about places. Examples of place requests follow: Place Search returns a list of places based on
 27 a user's location and search string; Place Details returns more detailed information about a

1 specific place, including user reviews; Place Photos provides access to place-related photos;
 2 Place Autocomplete automatically fills in the name and address of a place as users type; and
 3 Query Autocomplete provides a query prediction for text-based geographic searches, returning
 4 suggested queries as users type.

5 99. The Place Details API returns information about places.

6 100. The Find Place API takes a text input and returns a place. The input can be any
 7 kind of places text data, such as a name, address, or phone number—the request must be a string.
 8 A Find Place API enables searching for place information using a variety of categories,
 9 including establishments, prominent points of interest, and geographic locations. A user can
 10 search for places either by proximity or a text string. A place search returns a list of places along
 11 with summary information about each place; additional information is available through a place
 12 details query. A nearby search can also be used to search for places within a specified area. A
 13 user can refine a search request by supplying keywords or specifying the type of place being
 14 searched for.

15 101. The Place Photos API allows Plaintiffs and Class members to add photographic
 16 content to digital map on an app or website. When Plaintiffs and Class members retrieve place
 17 information using a place details request, photo references would be returned for relevant
 18 photographic content. Find Place, Nearby Search, and Text Search requests can also return photo
 19 references per place. Plaintiffs and Class members can use a Place Photos API to access
 20 referenced photos and resize images to the optimal size for an app or website.

21 102. The Current Place SDK allows Plaintiffs and Class Members to make digital maps
 22 on apps or websites be location-aware and respond contextually to local businesses and other
 23 places near a user's device. The apps or website can thus cater to the user's location.

24 103. The Time Zone API enables Plaintiffs and Class members to request the time zone
 25 for locations.

26 104. These examples of particular characteristics and uses demonstrate the distinct core
 27 functionality of places APIs, for which there are no products that are reasonably interchangeable

1 for the same purposes. Plaintiffs and Class members have no economic substitutes for places
 2 APIs. There are no products roughly equivalent for the uses to which places APIs are put.

3 105. Places APIs have distinct pricing and pricing sensitivities.

4 106. There is no cross-elasticity of demand between places APIs and any purported
 5 reasonable substitutes (there are none).

6 107. Plaintiffs and Class members would not switch to reasonable alternatives (there
 7 are none) in response to price increases. Indeed, the across-the-board, drastic price increases in
 8 the middle of 2018 by Google—examples of which are alleged to have reached magnitudes of
 9 1,400%—and corresponding reduction of the value of the monetary credits did not result in
 10 Plaintiffs or Class members being able to shift demand to reasonable substitutes for Places APIs
 11 because there are no alternatives that have characteristics and uses reasonably interchangeable
 12 for the distinct core functionality of Places APIs. Plaintiffs allege drastic price increases over
 13 several years, all without Defendants' dominance in Places APIs slipping—there have been no
 14 new competitors over the past several years to challenge Defendants' dominance, and
 15 Defendant's existing competitors have been unable to make a dent into nor challenge Google
 16 Maps' dominance.

17 108. There is industry and public recognition of the Digital Places API Market as a
 18 distinct product market.

19 109. Even Google Maps itself on its websites categorizes Places APIs as a distinct
 20 product group, especially in terms of pricing menus and uses. An example of pricing during the
 21 Class Period includes \$17 for 1,000 calls for Google's Place Details API (used to link details
 22 about an establishment or point of interest).

23 110. Each of Plaintiffs Dream, Getify, and Sprinter recognize Places APIs as a distinct
 24 relevant product market, especially in terms of pricing and uses, and each of Plaintiffs Dream,
 25 Getify, and Sprinter do not have reasonable substitutes for Places APIs.

26 111. There are no substitutes that have characteristics and uses reasonably
 27 interchangeable for the distinct core functionality of places APIs. For example, non-digital
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1 forms of places data are not substitutes for Plaintiffs and Class members' use of places APIs.
 2 Plaintiffs and Class members could not practically set up call-in numbers for customers or
 3 potential customers visiting their apps or websites to call Plaintiffs and Class members to orally
 4 receive information about the Places—nor would customers or potential customers prefer this
 5 option. And directing customers or potential customers to leave Plaintiffs and Class members'
 6 apps or websites to visit entirely separate apps or websites to get information about the places
 7 would defeat the purpose of having the customer or potential customers visit Plaintiffs or the
 8 Class members' apps or websites in the initial instances.

9 112. The ability to link and view places APIs on an app or webpage is critical to the
 10 user's experience and to the likelihood of the user's patronage of Plaintiffs and Class members.
 11 If the user is required to view places APIs on an entirely separate and unlinked app or website,
 12 that user would simply abandon the app or website or stop interacting with it altogether. Routing
 13 users to an entirely separate and unlinked app or website is not a reasonable substitute.

14 *The Digital Routes API Market Is a Relevant Antitrust Product Market*

15 113. The geographic component of the Digital Routes API Market is throughout the
 16 United States, including the states, District of Columbia, and territories.

17 114. Routes APIs have distinct prices, pricing sensitivities, uses, and qualities, and
 18 products without these characteristics are not reasonably interchangeable for routes APIs. There
 19 are no reasonable substitutes.

20 115. Routes APIs are used by Plaintiffs and Class members to create, use, and link data
 21 concerning directions, navigation, turn-by-turn navigation, traffic data, travel distances, travel
 22 times, and roads. Routes APIs enable Plaintiffs and Class members to use and link this data with
 23 digital maps on their apps or websites.

24 116. Distinct qualities of Routes APIs include the following: directions and distances
 25 between locations and calculations of directions and distances, including for several modes of
 26 transportation, such as transit, driving, walking, or cycling; layering directions and distances on
 27 top of each other and on top of other tiles on a digital map; travel distances, durations, routes,
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1 and times for a matrix of origins and destinations, with recommended routes and different units
2 (such as kilometers or miles); Global Positioning System (“GPS”) coordinates for geometry of
3 roads and to determine speed limits; identification of roads that a particular vehicle was traveling
4 along; and the closest roads to users. These examples of particular characteristics and uses
5 demonstrate the distinct core functionality of Routes APIs, for which there are no products that
6 are reasonably interchangeable for the same purposes.

7 117. Although competitors and Google Maps may use different names for the specific
8 APIs that are part of the Digital Routes API Market, and those APIs may have sub-features,
9 they are all used for the same overarching purpose of retrieving and linking data concerning
10 directions, navigation, turn-by-turn navigation, traffic data, travel distances, travel times, and
11 roads on a digital app or website, and Plaintiffs thus allege them as the Digital Routes API
12 Market.

13 118. As examples and for context, Google’s types of Routes APIs offered during the
14 Class Period are listed below.

15 119. The Directions API returns data concerning directions between locations,
16 calculations of directions, and distances between locations. It is available in several formats,
17 such as a standalone API, as part of other APIs, or for server-side use as part of data libraries.
18 Plaintiffs and Class members can retrieve more than driving directions; in addition, they can
19 retrieve directions for several modes of transportation, such as transit, driving, walking, or
20 cycling.

21 120. The Directions JavaScript API can layer objects on a digital map that consist of
22 one or more separate items but can be manipulated as a single unit. It is available in several
23 formats, such as a standalone API, as part of other APIs, or for server-side use as part of data
24 libraries. Layers generally reflect collections of objects that add on top of a digital map to
25 designate a common association. The presentation of objects within layers can be rendered with
26 constituent items into one object (typically a tile overlay) and displayed as a map’s viewpoint
27 changes. Layers may also alter the presentation layer of the digital map itself, slightly altering
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1 the base tiles in a fashion consistent with the layer.

2 121. The Distance Matrix API and Distance Matrix JavaScript provides travel distance
 3 and times for a matrix of origins and destinations and consists of rows containing duration and
 4 distance values for each pair. It is available in several formats, such as a standalone API, as part
 5 of other APIs, or for server-side use as part of data libraries. Data is returned based on the
 6 recommended route between start and end points. Plaintiffs and Class members can request
 7 distance data for different travel modes, request distance data in different units (such as
 8 kilometers or miles) and estimate travel time in traffic. A Distance Matrix API can be used when
 9 a solution requires distance and travel time between a large list of origin-destination points.

10 122. The Roads API allows Plaintiffs and Class members to map GPS coordinates to
 11 the geometry of a road and determine speed limits along road segments.

12 123. The Snap to Roads API identifies the roads a vehicle was traveling along and
 13 provides additional metadata about those roads, such as speed limits.

14 124. The Nearest Roads API takes up to 100 independent coordinates and returns the
 15 closest road segment for each point. The points passed do not need to be part of a continuous
 16 path.

17 125. These examples of particular characteristics and uses demonstrate the distinct core
 18 functionality of routes APIs, for which there are no products that are reasonably interchangeable
 19 for the same purpose. Plaintiffs and Class members have no economic substitutes for routes
 20 APIs. There are no products roughly equivalent for the uses to which routes APIs are put.

21 126. Routes APIs have distinct pricing and pricing sensitivities.

22 127. There is no cross-elasticity of demand between routes APIs and any purported
 23 reasonable substitutes (there are none).

24 128. Plaintiffs and Class members would not switch to reasonable alternatives (there
 25 are none) in response to price increases. Indeed, the across-the-board, drastic price increases in
 26 the middle of 2018 by Google Maps—examples of which are alleged to have reached
 27 magnitudes of 1,400%—and corresponding reduction of the value of the monetary credits did

1 not result in Plaintiffs or Class members being able to shift demand to reasonable substitutes for
 2 routes APIs because there are no alternatives that have characteristics and uses reasonably
 3 interchangeable for the distinct core functionality of routes APIs. Plaintiffs allege drastic price
 4 increases over several years, all without Defendants' dominance in routes APIs slipping—there
 5 have been no new competitors over the past several years to challenge Defendants' dominance,
 6 and Defendant's existing competitors have been unable to make a dent into nor challenge
 7 Google Maps' dominance.

8 129. There is industry and public recognition of the Digital Routes API Market as a
 9 distinct product market.

10 130. Even Google Maps itself on its websites categorizes Routes APIs as a distinct
 11 product group, especially in terms of pricing menus and uses. An example of pricing includes
 12 \$5 for 1,000 calls on Google Maps' Routes Directions API (used to receive and link directions
 13 for different transportation modes).

14 131. Each of Plaintiffs Dream, Getify, and Sprinter recognize Routes APIs as a distinct
 15 relevant product market, especially in terms of pricing and uses, and each of Plaintiffs Dream,
 16 Getify, and Sprinter do not have reasonable substitutes for Routes APIs.

17 132. There are no substitutes that have characteristics and uses that are reasonably
 18 interchangeable for the distinct core functionality of routes APIs. For example, non-digital forms
 19 of routes data are not substitutes for Plaintiffs and Class members' use of Routes APIs. Plaintiffs
 20 and Class members could not practically send a paper map to customers or potential customers
 21 visiting their apps or websites. Plaintiffs and Class members could not practically set up call-in
 22 numbers for customers or potential customers visiting their apps or websites to call Plaintiffs
 23 and Class members to orally receive routing information—nor would customers or potential
 24 customers prefer this option. And directing customers or potential customers to leave Plaintiffs
 25 and Class members' apps or websites to visit entirely separate and unlinked apps or websites to
 26 get digital routing data would defeat the purpose of having the customers or potential customers
 27 visit Plaintiffs or the Class members' apps or websites in the initial instances.

1 C. **The Non-Competitive Landscape**

2 133. Competitors exist in the Digital Maps API Market, Digital Places API Market,
 3 and Digital Routes API Market, but none are able to meaningfully compete with Google's
 4 products due to Google's anticompetitive acts.

5 134. For personal navigation, individual consumers can search for digital-mapping,
 6 traffic, navigational tools, and places information either through a standalone product that
 7 licenses the underlying data, such as MapQuest, Bing Maps, or Yellowpages.com (owned by
 8 Thryv Holdings, Inc.), or through a vertically integrated provider, such as Google Maps or
 9 Waze. This independent segment is referred to as "turn-by-turn navigation."

10 135. Business-facing providers of maps APIs, places APIs, and routes APIs sell them
 11 or otherwise provide them in exchange for monetary credits—or some even provide them with
 12 no out-of-pocket cost, but make money from data collection or advertising—to the direct
 13 business users, such as Plaintiffs and Class members. Transacting between business-facing
 14 providers (for example, Google Maps) and the direct customers (Plaintiffs and Class members)
 15 are referred to as "business-to-business."

16 136. The distinction between "turn-by-turn navigation" and "business-to-business"
 17 was referred to and supported by the House Antitrust Report. For example:

18 Google Maps is the ***dominant provider*** of mapping data and turn-by-turn
 19 navigation services. The company declined to provide the Committee with
 20 information about the market share captured by Google Maps. ... According to a
 21 third-party estimate, however, Google Maps combined with Waze captures ***81% of***
the market for turn-by-turn navigation services.⁴ ... One market participant,
 22 meanwhile, estimated that ***Google Maps API captures over 90% of the business-***
to-business market.⁵

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25 ⁴ MARC S.F. MAHANEY, ROYAL BANK OF CANADA CAP. MKTS., ALPHABET INC.:
 26 DIGGING FOR BURIED TREASURE – THE GOOGLE MAPS OPPORTUNITY 4 (Sept. 23,
 27 2019) (on file with the House Antitrust Subcommittee) (emphasis added).

28 ⁵ House Antitrust Report, at 234 & n. 1,409-410 (citing Submission from Source 564, to House
 29 Antitrust Subcommittee, 2 (Nov. 13, 2019) (on file with the House Antitrust Subcommittee))
 (emphasis added).

1 137. A reasonable interpretation of this language—indeed, its express language—in
 2 the House Antitrust Report is that Google Maps has monopoly power over the Digital Maps API
 3 Market: “***Google Maps API captures over 90% of the business-to-business market.***” That the
 4 House Antitrust Report relied on a confidential source who is a market participant to support
 5 the over-90% market-share figure does not discount the probative value that this offers to
 6 Plaintiffs and Class members’ claims. Quite the opposite: it is reasonable to allege that the House
 7 Antitrust Subcommittee conducted a thorough investigation and would not have included such
 8 a point in the House Antitrust Report without sufficient support. That this confidential source is
 9 a market participant adds support; indeed, retained experts are often market participants.

10 138. In connection with the business-to-business segment, Plaintiffs and Class
 11 members often seek to combine, use, or link products in the Digital Maps API Market, the
 12 Digital Places API Market, and the Digital Routes API Market to interact with or display with
 13 each other on a screen, app, or website. This use is consistent for each of Plaintiffs Dream,
 14 Getify, and Sprinter.

15 139. Plaintiffs and Class members do not purchase or expend monetary credits for
 16 Google’s Maps APIs, Places APIs, or Routes API, in order to use those products on Google
 17 Maps or Defendants’ own property or platforms. Instead, Plaintiffs and Class members purchase
 18 or expend monetary credits for Google’s Maps APIs, Places APIs, and Routes APIs for use on
 19 their own property, outside of Defendants’ own property, apps, websites, or platforms. The
 20 anticompetitive practices reach and harm Plaintiffs and Class members on their own property,
 21 apps, websites, and other operations—not on Google Maps nor Defendants’ own property, apps,
 22 websites, or platforms. This is consistent for each of Plaintiffs Dream, Getify, and Sprinter and
 23 Class members.

24 140. In terms of apps or websites, Plaintiffs and Class members purchase or expend
 25 monetary credits for Google’s Maps APIs, Places APIs, or Routes APIs, all in order to use or
 26 link them on one app or website.

27 141. There is sufficient demand from Plaintiffs and Class members to purchase or
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1 expend monetary credits for Google's Maps APIs and places APIs or routes APIs from
 2 competitors of Google (indeed, even to use them for free from competitors other than Google
 3 Maps), in order to use and link them together from the different competitors on one digital screen
 4 on one app or website.

5 142. But despite the market demand for such product use or linking, Defendants' 6 anticompetitive schemes render it infeasible from an economic perspective—and forbidden 7 from a contractual perspective—for Plaintiffs and Class members to purchase or expend 8 monetary credits for Google's Maps APIs and use and link a competitors' places APIs or routes 9 APIs. Each of Plaintiffs Dream, Getify, and Sprinter have been forced to use only Google's 10 Maps APIs, Places APIs, or Routes APIs—to the exclusion of competitors' maps APIs, places 11 APIs, or routes APIs.

12 143. Any argument that Plaintiffs or Class members are free to create one digital map 13 using only Google's Maps APIs, Places APIs, and Routes APIs and then create an entirely 14 separate and unlinked digital map using only competitors' maps APIs, places APIs, and routes 15 APIs contradicts economic reality. This is consistent for Plaintiffs Dream, Getify, and Sprinter.

16 144. It does not make economic sense for Plaintiffs and Class members to devote 17 money, credits, time, effort, or digital real estate to (i) link on one app, on one webpage, on one 18 website, or on one other type of digital display or screen for Plaintiffs and Class members' 19 customers or potential customers to view a digital map created from purchased or monetary- 20 credit expended Maps APIs from Google Maps, and then *also* (ii) use places APIs or routes 21 APIs from competitors on an entirely separate and unlinked app, webpage, website, or separate 22 and unlinked type of digital display or screen for Plaintiffs and Class members' customers or 23 potential customers to view. In addition to additional developer time and other costs, most 24 practical uses of such combinations require them to be linked together. For instance, 25 navigational directions would not be helpful to users, if used in a separate app unlinked from a 26 map itself. This limitation is consistent for Plaintiffs Dream, Getify, and Sprinter. The ability to 27 view maps APIs, places APIs, and routes APIs together on one digital screen or display on an 28

1 app or website is critical to the user's experience and to the likelihood of the user's patronage
 2 of Plaintiffs and Class members. If the user is required to view the maps APIs, places APIs, and
 3 routes APIs on entirely separate and unlinked screens, that user would simply abandon the app
 4 or website or stop interacting with it altogether. Routing users to a separate and unlinked app,
 5 website, or digital screen is not a reasonable substitute.

6 145. Further, any argument that Plaintiffs and Class members can purchase one set of
 7 tying and tied products from Google and a separate, unlinked set of tying and tied products from
 8 a competitor—which again, makes neither economic nor practical sense for Plaintiffs and Class
 9 members—and that this is a defense to tying claims runs afoul of tying law under federal and
 10 state antitrust laws, since such an argument would mandate that tying claims can only be
 11 sustained where a defendant has 100% market share of the tying product and is the only
 12 competitor in the tying product.

13 146. If this is a defense, there would rarely ever be a cognizable tying claim because
 14 most independent sets of tying and tied products would normally be permitted to be bought or
 15 used separately from separate competitors. Defendants tying two separate products together but
 16 purportedly allowing plaintiffs to purchase the tying and tied products from competitors is not
 17 a defense to a tying claim. The antitrust violation occurs when plaintiffs are alleged to have been
 18 forced to purchase or use the tied product or alleged to have been forced to not purchase nor use
 19 a competitor's tied product, as each of Plaintiffs Dream, Getify, and Sprinter experienced.

20 147. But Defendants' anticompetitive actions alleged herein (for example, negative
 21 tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative, attempted
 22 monopolization)) short-circuit the normally competitive process, causing competitive harm to
 23 Plaintiffs and Class members, to indirect users of Plaintiffs and Class members' digital property,
 24 and to competition generally.

25 **D. Competitors**

26 148. There are generally two sets of customers of Google's Maps APIs, Places APIs,
 27 and Routes APIs. First are the direct customers, which are represented by Plaintiffs and the

1 Class. These are typically app or website developers or other types of businesses that buy or
2 expend monetary credits for Google's Maps APIs, Routes APIs, and Places APIs directly from
3 Google, in order for them (such as Plaintiffs and Class members) to create, use, and link digital
4 maps on their own property, such as apps, websites, or back-office operations. Second are the
5 indirect consumers who view the digital maps on the direct customers' apps or websites.

6 149. Generally, the more robust a product within Google's Maps APIs, Places APIs,
7 or Routes APIs, the more they cost. During the Class Period, desktop-based pulls and more-
8 advanced functions, such as current-location tracking, directions, route-mapping search, speed
9 limits, or street view, can go a la carte for as much as \$32 per 1,000 views. All of this affects
10 the features that app or website developers will choose to implement and the overall impression
11 that their end users will have when considering their app, website, products, or service against
12 competitors.

13 150. The monopolistic provider in the Digital Maps API Market is Google. This
14 allegation is based, in part, on the House Antitrust Report's findings that Google captures over
15 90% market share of the directly relevant business-to-business transacting in maps APIs and
16 that Google and Google-owned Waze together capture over 81% market share of the indirectly
17 relevant turn-by-turn navigation usage. Google Maps has monopoly power in the Digital Maps
18 API Market, including direct use of monopoly power.

19 151. There are competitors to Google Maps that can offer maps APIs, places APIs,
20 and routes APIs to Plaintiffs and Class members. These competitors recognize the Digital Maps
21 API Market, the Digital Places API Market, and the Digital Routes API Market as separate
22 relevant products markets, offer the various products individually, and, unlike Google Maps,
23 permit Plaintiffs and Class members to use their maps APIs, places APIs, and routes APIs while
24 also using maps APIs, places APIs, and routes APIs from competitors to be linked and integrated
25 into one digital map to be created and displayed on one app, website, webpage, or other type of
26 digital display or screen.

27 152. But because Defendants have cut off the air supply of competitors with the
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1 anticompetitive schemes alleged herein, these competitors have been strangled out of competing
 2 effectively. Based on information and belief from researching the House Antitrust Report, the
 3 industry, analysts' reports, and competitors' publicly available statements, the competitors to
 4 Google Maps in the Digital Maps API Market combined have a weak and minuscule market
 5 share, compared to Google Maps' more than 90% market share.

6 153. Defendants' Terms of Service, coercive enforcement, and policies are the reasons
 7 that these competitors have negligible market share. Competitors stand ready to compete, but
 8 for Defendants' anticompetitive activities.

9 154. Competitors include the following, without limitation: Mapbox (which has
 10 offered 50,000 free map loads per month during the Class Period); OpenStreetMap; 51Degrees;
 11 Bing; MapQuest; Apple Maps; Comtech Telecommunications Corp.; Telenav Inc. ("Telenav");
 12 The United States Geological Survey ("USGS," which provides some digital-mapping APIS);
 13 HERE Technologies ("HERE") (which has offered an extremely generous free model of
 14 250,000 transactions per month during the Class Period); TomTom (which has offered 2,500
 15 free daily transactions during the Class Period); Esri (which has offered a general free model of
 16 1,000,000 transactions per month during the Class Period); and Bing Maps.

17 155. Some of these providers operate in particularly specialized markets. For example,
 18 HERE and TomTom primarily serve automotive customers; Esri provides desktop Geographic
 19 Information System ("GIS") software used by governments and spatial analysts.

20 156. The combined market share of these competitors in the Digital Maps API Market
 21 is dwindling and anemic and pales in comparison to Google Maps' above-90% market share.

22 157. None of these competitors have made a dent in Google Maps' above-90% market
 23 share in the Digital Maps API Market, even despite Google's alleged direct demonstrations of
 24 market power for years (as alleged below).

25 158. Simply as one example of a competitor that offers the market high-quality places
 26 APIs and routes APIs, Mapbox was founded in 2010 to supply non-profit environmental and
 27 humanitarian organizations with digital-mapping data and analysis. It is an open-source

1 mapping platform. Mapbox provides places APIs and routes APIs. Although Mapbox's digital-
 2 mapping APIs are currently not free, it stays true to its open-source origins, releasing code and
 3 contributing to numerous mapping libraries and applications, which in turn allows developers
 4 to contribute to and improve Mapbox's places APIs and routes APIs. Mapbox releases its code
 5 and encourages the digital-mapping community to inspect and improve it. It supports a
 6 community of volunteer mappers, who often provide fresh updates, including fast-changing
 7 data, to Mapbox's places APIs and routes APIs. Mapbox offers credits, and its prices above
 8 credits are significantly more affordable than Google's prices for its Places APIs and Routes
 9 APIs. Mapbox's quality of places APIs and routes APIs match—and even have advantages
 10 over—Google's Places APIs and Routes APIs. Indeed, customer reviews indicate that Mapbox
 11 even provides more customizability than Google Maps.

12 159. As one other example of a competitor's benefits to the market, OpenStreetMap is
 13 an open-source provider that is free for its business-to-business customers. It is a community-
 14 powered project that supplies digital-mapping data. Being an open-source map, it is completely
 15 free to use, yet maintains a high level of accuracy and detail thanks to the efforts of local map
 16 enthusiasts and engineers who populate OpenStreetMap with data and support it.
 17 OpenStreetMap's quality is high enough that Mapbox uses it as support for Mapbox's digital-
 18 mapping APIs.

19 160. Since 2013, there has been no meaningful competitor that has entered the relevant
 20 antitrust products markets of Digital Maps APIs, Digital Places APIs, and Digital Routes APIs.

21 **E. House Subcommittee Report Supports Allegations of Google's Market**
Power and Antitrust Misconduct

22 161. The 450-page House Antitrust Report, which Plaintiffs submitted fully in this
 23 Action on August 30, 2022,⁶ resulted from a bipartisan investigation into "the state of
 24 competition online" that spanned seven hearings and was based on a record that included over
 25 1.13 million documents from Defendants (and over 1.28 million documents in total), interviews,

26
 27
 28⁶ ECF No. 35-1 (hereinafter, "House Antitrust Report").

1 roundtables, consultations, and testimony from target technology companies (including from
 2 Defendants' highest-level executives), former employees, antitrust experts across the political
 3 spectrum, market participants, industry participants, government witnesses, regulators, federal
 4 antitrust agencies, subject-matter experts, academics, public-interest-group representatives,
 5 antitrust law professors, and antitrust lawyers.⁷

6 162. Although the target companies that were the focus of the House Antitrust Report,
 7 which were called "dominant platforms" and includes Google, provided substantial information
 8 to the House Antitrust Subcommittee directly, the companies (including Google) "declined to
 9 produce certain critical information and crucial documents" requested, which were apparently
 10 withheld because of the companies' claimed protections under common law privilege and
 11 "documents that were produced to antitrust authorities in ongoing investigations, or that related
 12 to the subject matter of these ongoing investigations."⁸

13 163. As such, it is likely that additional, crucial information concerning the allegations
 14 herein are within Defendants' possession but were not produced to the House Antitrust
 15 Subcommittee, which could further support the findings in the House Antitrust Report.⁹

16 *Monetary Credits*

17 164. Prior to 2018, Google Maps offered meaningful amounts of monetary credits to
 18 lure Class members into building their apps, websites, or other digital property with Google's
 19 Maps APIs, Routes APIs, and Places APIs.

20 165. However, around May 2018 and continuing thereafter, Google introduced a single
 21 "pay-as-you-go" pricing plan for its Maps APIs, Routes APIs, and Places APIs.

22 166. Prices soared across Google's Maps APIs, Places APIs, and Routes APIs. For
 23 example, Google drove up the price for its Dynamic Maps API from \$0.50 to \$7.00 per 1,000
 24 uses of its APIs (or "calls" to the API).

25
 26 ⁷ See House Antitrust Report, at 6, 8, 10, 22.
 27 ⁸ See *id.*, at 8, 10.
 28 ⁹ No discovery has commenced in this Action.

1 167. With the significantly escalated prices across the board for Google’s Maps APIs,
 2 Places APIs, and Routes APIs, the value of the monetary credits plummeted because they would
 3 be expended for relatively far fewer API calls, in addition to the dramatic decrease in the
 4 monthly threshold. For example, this shift reduced the number of monetary credits that could be
 5 expended on Dynamic Maps API calls from 25,000 per day to around 930 per day.

6 168. Developers have reported to the House Antitrust Subcommittee that ever since
 7 Google Maps enforced these unexpected, drastic pricing changes, the pricing change amounted
 8 to increases of 1,400% in many instances.¹⁰

9 169. One developer stated that Google instituted this price hike after “gaining
 10 dominance”; since becoming a Google Maps customer, the market participant’s costs “have
 11 increased over 20x[.]”¹¹

12 170. Another developer stated that the 2018 pricing change “took our bill from
 13 \$90/month in October to \$20,000/month in December.”¹²

14 171. Several developers expressed their frustrations to the House Antitrust
 15 Subcommittee, noting that Google Maps’ decision to hike prices so sharply and without
 16 significant notice underscored its power to set the terms of commerce.

17 172. Given Google’s monopolistic position (or in the alternative and at the least,
 18 sufficient market and economic power) in Maps APIs, the adverse effects on competition in all
 19 of the relevant antitrust products markets as a result of the alleged anticompetitive schemes—
 20 negative tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative,
 21 attempted monopolization)—have been more than substantial throughout the U.S.

22 173. For context, Defendants do not publicly disclose specific financial metrics for
 23 Google Maps. But Defendants and analysts have reported throughout the Class Period that
 24 Google Maps has more than a billion users per month. Experienced analysts have estimated that

26 ¹⁰ House Antitrust Report, at 239-40.
 27 ¹¹ House Antitrust Report, at 240.
 28 ¹² *Id.*

1 Google Maps' annual revenues as of late 2019 have ranged between \$2.95 billion to 4.3 billion,
 2 projections for 2020 annual revenue were \$4.8 billion, projections during the Class Period for
 3 annual revenue reached \$9 billion, and projections for 2023 annual revenues reached
 4 approximately \$11 billion. Evaluated as a standalone business, Google Maps has been estimated
 5 by analysts and a bank to have revenues between \$50 billion and \$61.5 billion during the Class
 6 Period. A material component of these annual revenues was generated through the
 7 anticompetitive practices alleged herein. A substantial volume of commerce throughout the U.S.
 8 is alleged to have been adversely affected. The alleged anticompetitive schemes—negative
 9 tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative, attempted
 10 monopolization)—have caused a material effect on commerce throughout the U.S. Further,
 11 despite having flexed direct monopoly power (as alleged below) for several years, Google Maps'
 12 growth and financial performance under these metrics have only increased, demonstrating the
 13 inability of competitors to temper Google's anticompetitive actions.

14 *Google's Use of Customer Data Further Cements its Monopoly Power*

15 174. As the House Antitrust Report put it, market participants pay twice for Google's
 16 Maps APIs, Places APIs, or Routes APIs: paying first in data, and second in direct payment.
 17 This finding is particularly apt because Defendants benefit greatly from the stream of
 18 information that aids their databases. For example, as of late 2019, Google Maps users have
 19 contributed more than 20 million pieces of information every day, which is more than 200
 20 contributions every second.

21 175. According to the House Antitrust Report, citing Professors Dirk Bergemann,
 22 Alessandro Bonatti, and Tan Gan, in a paper published in September 2019, entitled "The
 23 Economics of Social Data," recent economic evidence indicates that economies of scale
 24 achieved through data collection allow platforms to get more out of users than users get out of
 25 platforms.

26 176. Users provide valuable data, including, without limitation, data about other users'
 27 behavior in addition to their own data, in exchange for products, services, or tools, even
 28

1 purportedly free products, services, or tools.

2 177. The House Antitrust Report, citing Professors Bergemann, Bonatti, and Gan,
 3 explained that an example is a user's location history using Google Maps, which reveals
 4 valuable and sensitive information about others as well, such as traffic patterns and other data.
 5 According to these professors, the creation of this data externality means that for Google, for
 6 example, the cost of acquiring such data can be substantially below the value of the information
 7 to the platform. Regardless of whether the products are purportedly free to users, the data
 8 gathered by Google from such users may exceed the economic value to users.¹³

9 178. The House Antitrust Report explained how location data, which is data that
 10 Google Maps provides to Defendants, is critical to Defendants' business:

11 [Google's offerings] *provides Google with a trove of user data, reinforcing its*
 12 *dominance across markets and driving greater monetization through online ads.*
 13 *Through linking these services together, Google increasingly functions as an*
 14 *ecosystem of interlocking monopolies.*¹⁴

15 * * *

16 The Subcommittee's investigation also revealed that Android gives Google
 17 unparalleled access to data on its users and developers. This includes information
 18 that Google can monetize through its ad business, as well as strategic intelligence
 19 that lets Google track emerging competitors and general business trends.

20 Android's dominance in the mobile operating system market enables it to
 21 extensively surveil its users. This surveillance is partly enabled through Google's
 22 technology. In key ways Google also uses its dominance and its integration across
 23 markets to increase the number of touchpoints from which it is constantly mining
 24 user data.

25 * * *

26 Combined with location data, which Android also extensively collects, Google can
 27 build sophisticated user profiles reflecting a person's demographic, where they are,
 28

29 ¹³ House Antitrust Report, at 45-46 & n. 162-64 (citing Dirk Bergemann, Alessandro Bonatti &
 30 Tan Gan, *The Economics of Social Data* (Cowles Foundation Discussion Paper No. 2203R, Sept.
 31 2019), <https://ssrn.com/abstract=3459796> and Erik Brynjolfsson & Avinash Collis, *How Should*
 32 *We Measure the Digital Economy?*, HARV. BUS. REV. (Nov.-Dec. 2019),
 33 <https://hbr.org/2019/11/how-should-we-measure-the-digital-economy>).

34 ¹⁴ House Antitrust Report, at 15.

1 and where they go, as well as which apps they use at what time and for how long.
 2 ... These intimate user profiles, spanning billions of people, are a key source of
 3 Google's advantage in its ad business. In this way, Android's location data feeds
 4 into Google's dominance in ads.¹⁵

5 * * *

6 Google now monetizes both Waze and Google Maps through selling ads. In 2013
 7 Google introduced a limited form of maps advertising, and in recent years it has
 8 expanded the program, allowing local businesses to purchase advertising on maps
 9 to maximize foot traffic.¹⁶

10 * * *

11 One market participant stated that "Google has used Waze as an ads guinea pig,"
 12 noting that Waze has released efficacy reports of location-tailored ads, information
 13 that seems to have informed Google Maps' recent expansion of advertising.¹⁷

14 * * *

15 In effect, Google makes market participants pay twice to access Google Maps—
 16 first by giving Google their valuable usage data and then again by paying Google's
 17 volume-based fees for API calls.¹⁸

18 179. Professor Fiona M. Scott Morton, who is the Theodore Nierenberg Professor of
 19 Economics at the Yale University School of Management, and David C. Dinielli, who is a Senior
 20 Advisor of Beneficial Technology at the Omidyar Network, in May 2020 published a report
 21 entitled "Roadmap for a Digital Advertising Monopolization Case Against Google,"¹⁹ in which
 22 they described how data collected, in part through Google Maps, fuels Defendants' revenues
 23 and advertising:

24 Google built a dataset for its ad tech services that utilized the user data from its
 25 search engine and other customer-facing properties (Google Maps, Gmail, etc.) to

26 ¹⁵ House Antitrust Report, at 217-18.

27 ¹⁶ *Id.* at 233, n. 1,402 (citing MARC S.F. MAHANEY, ROYAL BANK OF CANADA CAP.
 28 MKTS., ALPHABET INC.: DIGGING FOR BURIED TREASURE – THE GOOGLE MAPS
 OPPORTUNITY 10–11 (Sept. 23, 2019)) (on file with the House Antitrust Subcommittee).

¹⁷ House Antitrust Report, at 239.

¹⁸ *Id.* at 240.

¹⁹ <https://publicknowledge.org/policy/roadmap-for-a-digital-advertising-monopolization-case-against-google/>.

1 give itself a superior ability to “target” ads to the right viewers.²⁰

2 * * *

3 Third, Google also owns multiple additional properties that offer supply for display
4 ads through the ad tech stack, including Google News, Google Maps, and Google
Play.²¹

5 * * *

6 The CMA concluded that Google has nearly insurmountable advantages in access
7 to location data, due to the location information it receives from the Android
8 operating system, Google search, and other applications such as Google Maps and
9 Waze, a driving direction application Google purchased at a nascent stage.²²

10 * * *

11 Google’s vertical integration strategy is closely related to its data gathering
12 strategy. First, Google offers an entire family of products—everything from Gmail
13 and Google Maps to the Google Calendar, Google Chrome, Android mobile
14 operating system and the search engine—that gather valuable personal data about
15 its users. Second, the products across the ad stack further collect data on consumer
16 activities that the company then integrates to maximize the effectiveness and
17 precision of ad targeting and attribution and thereby the value of the ads. The CMA
18 Report raises the criticism that these methods of data collection do not represent
19 competition on the merits. For example, although Google has said that it would not
20 collect data from its family of products to advantage itself in the digital advertising
21 market, it plainly does, according both to the CMA and to public sources.²³

22 * * *

23 Google is the platform with the largest dataset collected from its leading consumer-
24 facing services such as YouTube, Google Maps, Gmail, Android, Google Chrome
25 and from partner sites using Google pixel tags, analytical and advertising services.
26 A Google internal document recognizes this advantage saying that “Google has
27 more data, of more types, from more sources than anyone else.”²⁴

28 180. Professor Morton and Mr. Dinielli in June 2020 published a report entitled

20 *Id.* at 1-2.

21 *Id.* at 5.

22 *Id.* at 15.

23 *Id.* at 20.

24 *Id.* at 20 n. 80.

1 “Roadmap for a Monopolization Case Against Google Regarding the Search Market,”²⁵ in
 2 which they echoed how crucial data that Defendants access through Google Maps users is to the
 3 revenues and advertising:

4 Google has access to location data (from the Android Operating System, Google
 5 Maps, and other apps)—a key entry barrier for advertising ... Location information
 6 also is critical to Google’s ability to serve well-targeted search ads and charge high
 7 prices for those ads. Whereas demographic and other group membership
 8 information has particular value in display advertising (the hypothetical
 9 landscaping company trying to grow its brand would rather target people who own
 10 homes with yards than people who live in studio apartments), precise, real-time
 11 location information has particular value in connection with search advertising. ...
 12 A local donut shop, no matter how good its donuts, ideally wants to serve ads to
 13 people who are (a) hungry for donuts (as evidenced by, for example, a search for
 14 “donut shops”); and (b) within only a short distance from the shop at the time they
 15 are hungry for donuts. Knowing the precise location of the potential customer at
 16 the time she searches for “donuts” is far more valuable than knowing where she
 lives or where she was yesterday. It also is more valuable than knowing general
 demographic data such as whether she owns a home or votes Republican—the sort
 of information that might be valuable in a display campaign. Google has a
 tremendous advantage when it comes to location information. ... Microsoft
 suggested that accessing at-scale location data from user devices is a critical input
 to providing relevant, localized results. It indicated its belief that Google has unique
 advantages in this area, due to the location data that it receives from the Android
 operating system and the location data it receives when users access Google Search
 or other apps like Google Maps/Waze.²⁶

17 181. Google produced a document entitled “Google product plan,” which is on the
 18 House Antitrust Subcommittee’s website, with a starting BATES number of GOOG-HJC-
 19 03119814.²⁷ At the page GOOG-HJC-03119820-21, in a bulleted section entitled “What should
 20 be our strategy for acquiring local data from merchants?”, the document outlines at a high-level
 21 Defendants’ attempts to get local data from merchants ranging from large to small, in part
 22 through a proposed “link similar to Add/Edit Your Business on <http://maps.google.com/>.”

23 182. Google Maps collects, receives, uses, and maintains data from Plaintiffs and the

25 ²⁵ <https://omidyar.com/wp-content/uploads/2020/09/Roadmap-for-a-Monopolization-Case-Against-Google-Regarding-the-Search-Market.pdf>.

26 ²⁶ *Id.* at 18-19, n. 65.

27 <https://judiciary.house.gov/online-platforms-and-market-power/>.

1 Class and even their customers, including, without limitation, search terms, IP addresses, and
 2 latitude and longitude coordinates.

3 183. Data that Defendants collect from Google Maps users is combined with data that
 4 Defendants use in creating digital data profiles of users, which Defendants then monetize, in
 5 part through advertisers purchasing such profiles from Defendants to learn about users' digital
 6 habits or for Defendants to create targeted advertisements for third-party advertisers.

7 184. Google's Ad Manager ("GAM") is a tool that helps websites seeking to sell
 8 advertising space to find businesses wanting to place advertisements on those websites. Google
 9 uses GAM both to find purchasers for advertising space and to sell advertising space to
 10 advertising exchanges.

11 185. Google also operates its own advertising exchange, which is called Google Ad
 12 Exchange ("GAE"), and Google charges businesses fees when they purchase advertising space
 13 through GAE. A more-fulsome set of user data that Google compiles, in part through Google
 14 Maps, helps its operations through both GAM and GAE.

15 186. For example, GAM is set up to automatically retarget a user based on information
 16 that Google has previously collected, including, without limitation, geolocation data and data
 17 retrieved from Google Maps that is stored in Google's servers and libraries as user location and
 18 other information. Google continues to track and target the same user across the Internet, and
 19 the user's data profile is used in concurrent retargeting of ads by matching a user's browsing
 20 data with other user data. Another example is an X-Client-Data Header, which is an identifier
 21 that when combined with an IP address and user-agent data, uniquely identifies every download
 22 version of the Google Chrome browser. The X-Client-Data Header is sent from Chrome to
 23 Google every time users exchange an Internet communication, including, without limitation,
 24 when users use Google Maps.

25 187. "Because Google's monopoly in online search has furnished it with a trove of
 26 data, as well as a robust index, its place search feature is also seen by many market participants
 27 effectively as a must-have. One market participant that has lost business partnerships due to
 28

1 Google's coercive restrictions stated that Google is 'using access to its dominant search products
 2 as leverage to intimidate businesses out of working with other map providers.' . . . He noted that
 3 Google's conduct now threatens his firm's survival, saying, 'This is existential for us.'²⁸

4 188. One app developer noted to the House Antitrust Subcommittee that "Google's
 5 control over what now serves as a key mapping technology has allowed Google to call all the
 6 shots."²⁹ The developer said that "[w]e license Google Maps and it's essentially a contract of
 7 adhesion. It's full of restrictions and we aren't able to negotiate any changes."³⁰ And the
 8 developer added that although it explored alternative mapping providers, who "still value [them]
 9 and want to know how they can accommodate us," with Google, "we just have to comply with
 10 all their restrictions."³¹

11 189. In effect, Defendants make market participants pay twice to access Google
 12 Maps—first by giving Google their valuable usage data and then again by paying fees for APIs.

13 190. A market participant noted that Google "collects an unparalleled amount of data
 14 used in digital mapping from users of its dominant search engine and Android smartphone
 15 OS."³²

16 191. A barrier to entry is the distribution that Google in maps-adjacent lines of business
 17 can provide Google Maps at the expense of third-party mapping products. Google gives Google
 18 Maps default placement on its Android devices. Market participants explained that the default
 19 placement of Google Maps on Android devices also disadvantages third-party mapping
 20 providers technologically. If a developer chooses a third-party mapping provider when building
 21 an app, downloading that app on Android would involve downloading both the app features and

23 ²⁸ House Antitrust Report, at 241-242, n. 1,469-1,470 (citing Interview with Source 572 (Sept. 24,
 24 2020)).

²⁹ *Id.* at 234.

³⁰ *Id.*

³¹ *Id.*

³² House Antitrust Report, at 108, n. 581 (citing Submission from Source 531, to H. Comm. on the
 26 Judiciary, Source 531-000624 (on file with House Antitrust Subcommittee)); Production of
 27 Google, H. Comm. on the Judiciary, GOOG-HJC-04211078 (July 24, 2013) (on file with House
 28 Antitrust Subcommittee).

1 the mapping functionality. By contrast, choosing to develop the app with Google's Maps APIs
 2 would reduce the app's file size on Android, as Google Maps is already on the device.

3 192. The barriers to entry in totality have created strong market tipping effects for
 4 Google Maps in each of the relevant antitrust products markets of the Digital Maps API Market,
 5 Digital Places API Market, and Digital Routes API Market: competition is for domination of
 6 the markets, which Google Maps has, as opposed to competition within the markets.

7 193. Google Maps' dominance and its use of network effects, switching costs, the self-
 8 reinforcing advantages of data, and increasing returns to scale has made it more than prone to
 9 winner-take-all economics, which the House Antitrust Report has explained as crucial issues
 10 when assessing market power and barriers to entry in digital markets. For example, the Antitrust
 11 House Report stated the following³³:

12 Certain features of digital markets—such as network effects, switching costs, the
 13 self-reinforcing advantages of data, and increasing returns to scale—make them
 14 prone to winner-take-all economics.^[34] As a result, many technology markets “tip”
 15 in favor of one or two large companies,^[35] shifting the “the competitive process
 16 from competition *in* the market to competition *for* the market.”^[36] In turn, high
 17 barriers to entry may diminish the ability of new firms to challenge incumbent
 18 firms, further undermining the competitive process and protecting the dominance
 19 of existing firms.^[37] As the United Kingdom's Competition and Markets Authority
 20 explains:

21 “[I]f potential competitors face substantial barriers to entry and expansion, such
 22 that the market is no longer properly contestable, then a high market share can
 23 translate into market power, giving the platform the opportunity to increase prices,
 24 reduce quality or leverage market power to undermine competition in potentially
 25 competitive markets and deny innovative rivals the chance to bring new services to

22 ³³ House Antitrust Report, at 37-38, n. 103-07.

23 ³⁴ Data and Privacy Hearing at 2 (statement of Jason Furman, Prof. of the Practice of Econ. Pol'y,
 Harvard Kennedy School) (Other anticompetitive practices in digital markets—such as product
 24 design, self-preferencing, and anti-competitive contracting, among others—may also contribute to
 25 barriers that impede entry by rivals or new firms. While these issues are also present in other
 markets, they are much more pronounced in digital markets.)

26 ³⁵ *Id.*

27 ³⁶ CHICAGO BOOTH STIGLER CTR. FOR THE STUDY OF ECON. & STATE, STIGLER
 CMTE. ON DIG. PLATFORMS at 29, 35 (2019)

28 ³⁷ Data and Privacy Hearing at 2-3 (statement of Jason Furman, Prof. of the Practice of Econ.
 Pol'y, Harvard Kennedy School).

1 market.^[38]”

2 194. Since 2013, there has been no entry of a meaningful competitor into any of the
 3 Digital Maps API Market, the Digital Places API Market, and the Digital Routes API Market.

4 *Google Maps’ Terms of Service*

5 195. Any violations of the Google Maps Terms of Services are under Google’s
 6 watchful eye. Under the TOS Section 1.4, customers, such as Plaintiffs and the Class, must
 7 provide Google Maps with each authorized domain and app that uses any of Google’s Maps
 8 APIs, Places APIs, or Routes APIs. Under the TOS Section 3.2.2(c), at Google’s request,
 9 customers must submit their domains, apps, and projects to Google for review to ensure
 10 compliance. And under the TOS Section 5.1, Google may suspend Google’s Maps APIs, Places
 11 APIs, and Routes APIs without prior notice if customers breach the TOS.

12 196. Pursuant to the Court’s Order in this Action on November 30, 2023 (ECF No. 67,
 13 at 5-8), Plaintiffs focus the negative tying claim on Google Maps using its Maps APIs as the
 14 tying product, and its Places APIs and Routes APIs as the negatively tied products.

15 197. Defendants have been using, revising, and enforcing the TOS to prohibit Plaintiffs
 16 and Class members from using any of Google’s Maps APIs, Places APIs, and Routes APIs with
 17 competitors’ maps APIs, places APIs, and routes APIs.

18 198. According to the House Antitrust Report, several developers using Google Maps
 19 have told the House Antitrust Subcommittee that Google has been imposing anticompetitive
 20 restrictions as it has gained a more-dominant market position. Google has ratcheted up its
 21 prohibitions against app developers.³⁹

22 199. According to the House Antitrust Report, as an example, “developers choose to
 23 mix and match, using map data from one firm but places data from another.”⁴⁰

24
 25
 26 ³⁸ COMPETITION & MKTS. AUTH., ONLINE PLATFORMS AND DIGITAL
 ADVERTISING, MARKET STUDY FINAL REPORT 10–11 (2020).

27 ³⁹ See, e.g., House Antitrust Report, at 234-35, 239-47.

28 ⁴⁰ See, e.g., House Antitrust Report, at 240.

200. However, according to the House Antitrust Report, “Google . . . prohibits developers from using *any* part of its mapping tools alongside *any* non-Google mapping features.”⁴¹

201. According to the House Antitrust Report, Google has been revising TOS language as even more exclusionary and anticompetitive. The House Antitrust Report noted that the restriction was in the Google Maps Terms of Service.⁴²

202. According to the House Antitrust Report, until April 2020, Google's Maps Platform Terms of Service included the following provision:

(e) No Use With Non-Google Maps. Customer will not use the Google Maps Core Services in a Customer Application that contains a non-Google map. For example, Customer will not (i) display Places listings on a non-Google map, or (ii) display Street View imagery and non-Google maps in the same Customer Application.⁴³

203. According to the House Antitrust Report, in April 2020, Google amended the language to make the restrictions even more byzantine and exclusionary, while adding pretextual language to attempt to try justifying the anticompetitive restrictions in an unpersuasive manner:

Google Maps Content means any content provided through the Services (whether created by Google or its third-party licensors), including map and terrain data, imagery, trace data, and places data (including business listings).

* * *

(e) No Use With Non-Google Maps. To avoid quality issues and/or brand confusion, Customer will not use the Google Maps Core Services with or near a non-Google Map in a Customer Application. For example, Customer will not (i) display or use Places content on a non-Google map, (ii) display Street View imagery and non-Google maps on the same screen, *or (iii) link a Google Map to non-Google Maps content or a non-Google map.*⁴⁴

204. According to the House Antitrust Report, “*Both versions of this provision*

⁴¹ House Antitrust Report, at 240-41.

42 *Id.*

⁴³ House Antitrust Report, at 240-41, n. 1,465 (at 3.2.2(e)).

⁴⁴ House Antitrust Report, at 241 & 241 n. 1,466.

1 *prohibit developers from using any component of the Google Maps Core Service with*
 2 *mapping services provided by non-Google firms. The April 2020 change to the terms of service*
 3 *is even more restrictive: it prohibits developers from even displaying any component of Google*
 4 *Maps ‘near’ any other map.”⁴⁵* According to the TOS and House Antitrust Report, once
 5 Plaintiffs purchase any of Google’s Maps APIs, Places APIs, or Routes APIs, Google forbids
 6 them and they cannot use and link any competitors’ maps APIs, places APIs, nor routes APIs
 7 on a digital map, not even near each other, even in the same app, or even in the same website.

8 205. During the Class Period, Defendants have broadly defined the term “Google Maps
 9 Core Services” and “Services” to include all of “Google Maps Content”—Google’s Maps APIs,
 10 Places APIs, and Routes APIs—and “Software,” with Software having been broadly defined as
 11 “any downloadable tools, software development kits, or other computer software provided by
 12 Google for use as part of the Services, including updates.” Contrary to attempted arguments
 13 otherwise, should the language in the TOS throughout the Class Period truly have been
 14 permissive (it was not) of enabling Plaintiffs and the Class to use and link Google’s Maps APIs
 15 with competitors’ places APIs and routes APIs, then Google would have (i) provided separately
 16 and precisely defined terms for its Maps APIs as separate from its Places APIs and Routes APIs
 17 (rather than lumping them into one broad definition of “Google Maps Content” or “Google Maps
 18 Core Services”), (ii) provided separately and precisely defined terms for its competitors’ maps
 19 APIs, places APIs, and routes APIs, and (iii) removed the term “Customer will not ... link a
 20 Google Map to non-Google Maps content or a non-Google map.” Google did none of these.

21 206. Moreover, Google should not use its own imprecise drafting and off-the-record
 22 arguments about its interpretation – which in fact contradict the language in its own TOS,
 23 especially how it has evolved during the Class Period, findings in the Antitrust House Report,
 24 and Plaintiffs’ well-plead allegations – to undermine Plaintiff’s claims.

25 207. For most Plaintiffs and the Class, the initial digital-mapping API to form the base
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27 28 ⁴⁵ House Antitrust Report, at 241.

1 of a digital map are maps APIs. Google's Maps APIs are thus alleged to be the tying product.
 2 The overwhelmingly dominant provider in the Digital Maps API Market is Google Maps, with
 3 above 90% market share. Plaintiffs and the Class cannot feasibly avoid Google's Maps APIs in
 4 totality because of Google Maps' alleged monopoly share of above 90%, the barriers to entry
 5 (that Google, in part, helped erect) that keep existing competitors and potential new ones at bay,
 6 and the sheer data advantage that Google has, especially in connection with its Maps APIs,
 7 considering, for example, the cross-app data sharing within the panoply of Google's other apps
 8 and tools, and with Google Maps being a default app on Android mobile phones, which as
 9 alleged herein, gives Google Maps an additional advantage over competitors.

10 208. Google is using the negative tying with Maps APIs being the tying product, with
 11 the intent and effect of restraining existing competition in and acquiring or enhancing its
 12 power—or at the least, to maintain or slow down any diminution of its power resulting from
 13 true competition, absent the alleged anticompetitive restraints—in the negatively tied products,
 14 its Places APIs and Routes APIs.

15 209. The negative tying forecloses Plaintiffs and the Class from exercising competitive
 16 choices in selecting the negatively tied products of places APIs or routes APIs from competitors
 17 that they prefer; the negative tying narrows Plaintiffs and Class members' freedom as buyers of
 18 choice and facilitates Google's exploitation of them in connection with the negatively tied
 19 products of Places APIs and Routes APIs, through overcharging and other anticompetitive harm.
 20 The negative tying forecloses competition on the merits in the Digital Places API Market and
 21 Digital Routes API Market.

22 210. And in totality, this negative tying, exclusive dealing, self-preferencing, and
 23 monopolization (or at the least, attempted monopolization) results in anticompetitive effects and
 24 harm in all of the Digital Maps API Market, Digital Places API Market, and Digital Routes API
 25 Market, including, without limitation, anticompetitive price increases and reductions in
 26 monetary credits, output, supply, variety, quality, and innovation in each of the markets, but for
 27 the anticompetitive conduct. Even if Plaintiffs and Class members purchased or expended
 28

1 monetary credits on any one of Google Maps' Maps APIs, Places APIs, and Routes APIs, they
 2 have suffered anticompetitive harm and damages.

3 211. The anticompetitive actions in totality serve to lock-in Plaintiffs and Class
 4 members into the Google Maps ecosphere. They serve to exclude competitors in any of the
 5 Digital Maps API Market, Digital Places API Market, and Digital Routes API Market. By using
 6 the anticompetitive schemes to disable Plaintiffs and Class members from purchasing places
 7 APIs and routes APIs from competitors, Google forces those Plaintiffs and Class members to
 8 purchase Places APIs and Routes APIs from Google Maps and further entrench those Plaintiffs
 9 and Class members into the Google Maps ecosphere, making them more reliant on Google's
 10 Maps APIs as well. This helps further exclude competition on the merits in each of the Digital
 11 Maps API Market, Digital Places API Market, and Digital Routes API Market, foreclosing
 12 competitors from customers and scale to advance technology and benefit from the flywheel of
 13 innovation, and further erecting barriers to entry. Even if Plaintiffs and Class members only
 14 purchased Google's Maps APIs and did not purchase any of the Places APIs nor Routes APIs—
 15 for example, if they did not use them at all—then they still have been victims of anticompetitive
 16 harm and damages from Google's monopolization of the Digital Maps API Market through
 17 having paid prices (or expended monetary credits), that would have been cheaper, but for the
 18 anticompetitive actions that strangled out competition. The anticompetitive actions in totality
 19 are alleged to enhance and at the least, maintain Google's monopoly power in the Digital Maps
 20 API Market. The alleged anticompetitive actions in totality forecloses competition on the merits
 21 in the Digital Maps APIs Market, Digital Places APIs Market, and Digital Routes APIs Market.

22 *The House Antitrust Report Recognizes Google's Coercion and Exclusive Dealing*

23 212. In addition to the Terms of Service effectuating a negative tie, the House Antitrust
 24 Report noted several instances of coercion.

25 213. The House Antitrust Report even noted that in practice, these terms have resulted
 26 in exclusive dealing: "In practice, Google's contractual provision has led several major
 27 companies to switch entirely to Google's ecosystem, even in cases where they preferred
 28

1 mapping services from a non-Google provider, such as Mapbox.”⁴⁶

2 214. “Through interviews with market participants, the [House Antitrust
3 Subcommittee] learned that Google now enforces this provision aggressively.”⁴⁷

4 215. “Several developers stated that Google Maps introduced greater licensing
5 restrictions as it gained a stronger market position.”⁴⁸

6 216. “According to one firm, Google closely tracks and pressures developers who use
7 Google’s place data in conjunction with mapping data from a non-Google firm, effectively
8 forcing them to choose whether they will use all of Google’s mapping services or none of
9 them.”⁴⁹

10 217. “One firm described Google’s coercive tactics, stating, ‘It’s a bigger player
11 putting a gun to our head saying ‘switch or else.’”⁵⁰

12 218. ***Indeed, Google has admitted to negative tying.*** According to the House Antitrust
13 Report, “Google was asked to identify and justify any limits it places on the ability of app
14 developers who use the Google Maps Platform to use non-Google mapping services.”⁵¹ ***“Google***
15 ***responded that it does ‘restrict developers from incorporating Google Maps Core Services into***
16 ***an application that uses a non-Google map’ in*** order to ‘prevent brand confusion and other
17 negative user experiences.”⁵² As described above, Google subsequently changed its terms of
18 service to mirror its response to the [House Antitrust Subcommittee’s] question. However,
19 developers and mapping providers questioned Google’s rationale, noting that developers were
20 the ones best positioned to determine whether combining mapping services from multiple
21 providers created a ‘negative user experience.’ One provider added, ‘The developers we partner

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⁴⁶ *Id.*

⁴⁷ *Id.* at 241, n. 1,467.

⁴⁸ *Id.* at 234.

⁴⁹ *Id.* (citing Interview with Source 572 (Sept. 24, 2020)).

⁵⁰ *Id.* at 241, n. 1,468 (citing Interview with Source 157 (Sept. 25, 2020)).

⁵¹ House Antitrust Report, at 242.

⁵² *Id.*

1 with are extremely sophisticated. They're not confused.”⁵³

2 219. Contrary to Google’s self-serving and pretextual canned response, developers can
 3 seamlessly display on digital maps the competitors’ sources of maps APIs, places APIs, or routes
 4 APIs. Mapbox’s co-founder and chief executive officer (“CEO”), Eric Gunderson, testified that
 5 Google’s explanations for the restrictions lacked merit. The House Antitrust Report documented
 6 how Google Maps’ lack of competition allowed it to recklessly, if not intentionally, skimp on
 7 quality control, including, without limitation, having millions of fake business listings, causing
 8 anticompetitive harm but profit to Google from paid listing and advertising.

9 220. Google Maps improperly imposes the TOS that explicitly, implicitly, and
 10 practically result in when Plaintiffs or Class members purchase Google’s Maps APIs, then
 11 Plaintiffs and Class members are forbidden from using or linking any of competitors’ places
 12 APIs nor routes APIs on the same app, webpage, website, digital screen, or other type of digital
 13 display. If Plaintiffs and Class members want to use and link places APIs or routes APIs other
 14 than those from Google Maps, they cannot. Plaintiffs and Class members are forced to purchase
 15 unwanted Google’s Places APIs and Routes APIs, which they preferred to use from competitors.

16 *The House Antitrust Report Details Google’s Monopoly Power Through Data Privacy*

17 221. The House Antitrust Report supports the view that alleged data-privacy violations
 18 by technology companies can be evidence of monopoly power, having cited to several scholarly
 19 articles and opinions from antitrust regulators across the globe, including in the U.S.⁵⁴

20 222. The House Antitrust Report found that the persistent collection and misuse of data
 21 is an indication of market power. For example:

22 [T]he persistent collection and misuse of consumer data is an indicator of market
 23 power online [in the digital economy].⁵⁵ Online platforms rarely charge
 24 consumers a monetary price—products appear to be “free” but are monetized

25 ⁵³ *Id.* at 241-4, n. 1,473 (citing Interview with Source 572 (Sept. 24, 2020)).

26 ⁵⁴ See House Antitrust Report, at 18, 37, 51-56, 390.

27 ⁵⁵ Howard A. Shelanski, *Information, Innovation, and Competition Policy for the Internet*, 161 U.
 28 PA. L. REV. 1663, 1689 (2013) (“One measure of a platform’s market power is the extent to which
 it can engage in [privacy exploitation] without some benefit to consumers that offsets their reduced
 privacy and still retain users.”).

1 through people's attention or with their data.^[56] In the absence of genuine
 2 competitive threats, dominant firms offer fewer privacy protections than they
 3 otherwise would, and the quality of these services has deteriorated over time. As a
 4 result, consumers are forced to either use a service with poor privacy safeguards or
 5 forego the service altogether.^[57]

6 * * *

7 The benefits of robust competition in the digital economy goes beyond innovation
 8 and productivity. It can also spur firms to compete along other dimensions such as
 9 privacy and data protection. As a general matter, inadequate competition not only
 10 leads to higher prices and less innovation in many cases, but it can also reduce the
 11 quality of goods and services.^[58] Given that many digital products do not charge
 12 consumers directly for services, these firms often compete on quality.^[59] Along
 13 these lines, lack of competition can result in eroded privacy and data protection.^[60]
 14 Growing evidence indicates that a lack of competition goes hand in hand with just
 15 such quality degradation.^[61]

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 17 ⁵⁶ Data and Privacy Hearing at 3 (statement of Jason Furman, Professor of the Practice of
 18 Economic Policy, Harvard Kennedy School); Data and Privacy Hearing at 4-5 (statement of
 19 Tommaso Valletti, Professor of Economics, Imperial College Business School).

20 ⁵⁷ House Antitrust Report, at 18 & n. 31-33, 51 (citing DIG. COMPETITION EXPERT PANEL,
 21 UNLOCKING DIGITAL COMPETITION 43 (2019) ("[T]he misuse of consumer data and harm
 22 to privacy is arguably an indicator of low quality caused by a lack of competition,") [hereinafter
 23 Dig. Competition Expert Panel Report]; Dina Srinivasan, *The Antitrust Case Against Facebook: A Monopolist's Journey Towards Pervasive Surveillance in Spite of Consumers' Preference for Privacy*, 16 BERKELEY BUS. L.J. 39, 88 (2019) ("Consumers effectively face a singular
 24 choice—use Facebook and submit to the quality and stipulations of Facebook's product or forgo
 25 all use of the only social network.")).

26 ⁵⁸ Data and Privacy Hearing at 4 (statement of Tommaso Valletti, Prof. of Econ., Imperial College
 27 Bus. Sch.) ("Quality, choice, and innovation are also important aspects for competition and for
 28 consumer welfare."); Innovation and Entrepreneurship Hearing at 2-4 (statement of Maureen K.
 29 Ohlhausen, Partner, Baker Botts L.L.P.).

30 ⁵⁹ *Id.* at 3 (statement of Rohit Chopra, Comm'r, Fed. Trade Comm'n) ("These services do have a
 31 price, and you are paying for them with your data."); Data and Privacy Hearing at 3 (statement of
 32 Jason Furman, Prof. of the Practice of Econ. Pol'y, Harvard Kennedy School) ("Consumers may
 33 think they are receiving 'free' products but they are paying a price for these products in a number
 34 of ways.").

35 ⁶⁰ Innovation and Entrepreneurship Hearing at 4 (statement of Maureen K. Ohlhausen, Partner,
 36 Baker Botts L.L.P.); Data and Privacy Hearing at 3-4 (statement of Jason Furman, Prof. of the
 37 Practice of Econ. Pol'y, Harvard Kennedy School); Data and Privacy Hearing at 1 (statement of
 38 George Slover, Justin Brookman & Jonathan Schwantes) ("[A] dominant platform can disregard
 39 the interests of consumers in protecting their privacy, and design their platform to maximize its
 40 ability to monitor, monetize, and manipulate our personal interactions as consumers and as
 41 citizens.").

42 ⁶¹ House Antitrust Report, at 37 & n. 99-102 (citing Data and Privacy Hearing at 5 (statement of
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1 223. The House Antitrust Report based these stances on scholarly literature and market
 2 participants and antitrust practitioners' perspectives. For example:

3 Scholars and market participants have noted that even as online platforms rarely
 4 charge consumers a monetary price—products appear to be “free” but are
 5 monetized through people’s attention or with their data^[62]—traditional
 6 assessments of market power are more difficult to apply to digital markets.^[63]

7 The best evidence of platform market power therefore is not prices charged but
 8 rather the degree to which platforms have eroded consumer privacy without
 9 prompting a response from the market.^[64] As scholars have noted, a platform’s
 10 ability to maintain strong networks while degrading user privacy can reasonably be
 11 considered equivalent to a monopolist’s decision to increase prices or reduce
 12 product quality.^[65] A firm’s dominance can enable it to abuse consumers’ privacy
 13 without losing customers.^[66] In the absence of genuine competitive threats, a firm

14 Tommaso Valletti, Prof. of Econ., Imperial College Bus. Sch.)).

15 ⁶² Data and Privacy Hearing at 3 (statement of Jason Furman, Prof. of the Practice of Econ. Pol’y,
 16 Harvard Kennedy School); Data and Privacy Hearing at 5 (statement of Tommaso Valletti, Prof.
 17 of Econ., Imperial College Bus. Sch.).

18 ⁶³ House Antitrust Report, at 50 & n. 203-06 (citing Howard A. Shelanski, *Information,
 19 Innovation, and Competition Policy for the Internet*, 161 U. PA. L. REV. 1663, 1687 (2013))
 20 (“While increased competition, at least on its own, will not always cause firms to better use or
 21 protect customer information, any competitive effects analysis that misses these two nonprice
 22 dimensions of platform market performance will be incomplete and could be biased toward
 23 underenforcement.”)).

24 ⁶⁴ See, e.g., Makan Delrahim, Assistant Attorney General, U.S. Dep’t of Justice Antitrust Div.,
 25 Remarks for the Antitrust New Frontiers Conference (June 11, 2019),
<https://www.justice.gov/opa/speech/assistant-attorney-general-makan-delrahim-delivers-remarks-antitrust-new-frontiers> (“It is well-settled, however, that competition has price and non-price
 26 dimensions.”); Maurice E. Stucke & Ariel Ezrachi, *When Competition Fails to Optimize Quality:
 27 A Look at Search Engines*, 18 YALE J.L. & TECH. 70, 103 (2016); ELEONORA OCELLO &
 28 CRISTINA SJOODIN, EUR. COMM’N, COMPETITION MERGER BRIEF: MICROSOFT/LINKEDIN: BIG DATA AND CONGLOMERATE EFFECTS IN TECH MARKETS 5 (2017), <http://ec.europa.eu/competition/publications/cmb/2017/kdal17001enn.pdf>.

29 ⁶⁵ Dina Srinivasan, *The Antitrust Case Against Facebook: A Monopolist’s Journey Towards
 30 Pervasive Surveillance in Spite of Consumers’ Preference for Privacy*, 16 BERKELEY BUS. L.J. 39, 44 (2019) (“Facebook is a monopolist, and what Facebook extracts overtly from consumers
 31 today, from a quality perspective, is a direct function of Facebook’s monopoly power.”); see also
 32 Katharine Kemp, *Concealed Data Practices and Competition Law: Why Privacy Matters* (UNSW
 33 Law Research Paper No. 19-53, 2019),
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3432769; OECD, BIG DATA: BRINGING
 34 COMPETITION POLICY TO THE DIGITAL ERA (2016),
[https://one.oecd.org/document/DAF/COMP\(2016\)14/en/pdf](https://one.oecd.org/document/DAF/COMP(2016)14/en/pdf).

35 ⁶⁶ Data and Privacy Hearing at 5 (statement of Tommaso Valletti, Prof. of Econ., Imperial College
 36 Bus. Sch.); Dig. Competition Expert Panel Report at 42-45.

1 offers fewer privacy protections than it otherwise would. In the process, it extracts
 2 more data, further entrenching its dominance.^[67] When paired with the tendency
 3 toward winner-take-all outcomes, consumers are forced to either use a service with
 4 poor privacy safeguards or forego the service altogether.^[68] As the United
 5 Kingdom's Competition and Markets Authority observes, "The collection and use
 6 of personal data by Google and Facebook for personalised advertising, in many
 7 cases with no or limited controls available to consumers, is another indication that
 8 these platforms do not face a strong enough competitive constraint."^[69]

9 224. The House Antitrust Report noted that user data has shifted to be a critical resource
 10 and form of consideration. For example:

11 Given the increasingly critical role platforms play in mediating access to everyday
 12 goods and services, users are also far more likely to surrender more information
 13 than to cease using the service entirely.^[70] Without adequate competition, firms are
 14 able to collect more data than a competitive market would allow,^[71] further
 15 entrenching their market power while diminishing privacy in the process.^[72]

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 17 ⁶⁷ David N. Cicilline & Terrell McSweeney, *Competition Is at the Heart of Facebook's Privacy*
 18 *Problem*, WIRED (Apr. 24, 2018), <https://www.wired.com/story/competition-is-at-the-heart-of-facebook-s-privacy-problem>.

19 ⁶⁸ Dig. Competition Expert Panel Report at 43 ("[T]he misuse of consumer data and harm to
 20 privacy is arguably an indicator of low quality caused by a lack of competition."); Dina Srinivasan,
 21 *The Antitrust Case Against Facebook: A Monopolist's Journey Towards Pervasive Surveillance*
 22 *in Spite of Consumers' Preference for Privacy*, 16 BERKELEY BUS. L.J. 39, 40 (2019)
 23 ("Consumers effectively face a singular choice—use Facebook and submit to the quality and
 24 stipulations of Facebook's product or forgo all use of the only social network.").

25 ⁶⁹ COMPETITION & MKTS. AUTH., ONLINE PLATFORMS AND DIGITAL
 26 ADVERTISING, MARKET STUDY FINAL REPORT 318 (2020) [hereinafter Competition &
 27 Mkts. Auth. Report].

28 ⁷⁰ Giuseppe Colangelo & Mariateresa Maggiolino, *Data Protection in Attention Markets: Protecting Privacy through Competition?*, 8 J. OF EUR. COMPETITION L. & PRACTICE 363, 365 (2017).

⁷¹ Data and Privacy Hearing at 4 (statement of Dina Srinivasan, Fellow, Yale Thurman Arnold Project); Innovation and Entrepreneurship Hearing at 82 (Fiona Scott Morton, Theodore Nierenberg Prof. of Econ., Yale Sch. of Mgmt.).

⁷² Data and Privacy Hearing at 2 (statement of Jason Furman, Prof. of the Practice of Econ. Pol'y, Harvard Kennedy School); Data and Privacy Hearing at 5 (statement of Tommaso Valletti, Prof. of Econ., Imperial College Bus. Sch.); Dig. Competition Expert Panel Report at 4 ("It can be harder for new companies to enter or scale up."); Giuseppe Colangelo & Mariateresa Maggiolino, *Data Protection in Attention Markets: Protecting Privacy through Competition?*, 8 J. OF EUR. COMPETITION L. & PRACTICE 363, 365 (2017) ("Similarly, in such a market, a dominant firm could abuse its power to exclude a rival producing privacy-friendly goods that consumer would otherwise prefer."); Stigler Report at 67 ("When facing a zero-money price, and when quality is difficult to observe, consumers are not receiving salient signals about the social value of their

1 Because persistent data collection online is often concealed,^[73] it is more difficult
 2 to compare privacy costs across different products and services.^[74] Consumers are
 3 largely unaware of firms' data collection practices, which are presented in dense
 4 and lengthy disclosures.^[75] The use of manipulative design interfaces has also
 5 become a pervasive tool "to increase the likelihood of users consenting to
 6 tracking."^[76] These behavioral nudges—referred to as dark patterns—are
 7 commonly used in online tracking and advertising markets to enhance a firm's
 8 market power and "maximize a company's ability to extract revenue from its
 9 users."^[77] And in e-commerce, Jamie Luguri and Lior Strahilevitz observe that
 dark patterns "are harming consumers by convincing them to surrender cash or
 personal data in deals that do not reflect consumers' actual preferences and may not
 serve their interests. There appears to be a substantial market failure where dark
 patterns are concerned—what is good for ecommerce profits is bad for
 consumers."^[78]

10 * * *

11 To the extent that consumers are aware of data collection practices, it is often in the
 12 wake of scandals involving large-scale data breaches or privacy incidents such as

13 _____
 14 consumption because the price they believe they face does not reflect the economics of the
 15 transaction, and they are ignorant of those numbers.").

16 ⁷³ Data and Privacy Hearing at 4-5 (statement of Tommaso Valletti, Prof. of Econ., Imperial
 College Bus. Sch.).

17 ⁷⁴ Maurice E. Stucke, *Should We Be Concerned About Data-opolies?*, 2 GEO. L. TECH. REV.
 275, 311 (2018).

18 ⁷⁵ See, e.g., Paul Hitlin & Lee Rainie, *Facebook Algorithms and Personal Data*, PEW RES. CTR.
 (Jan. 16. 2019), <https://www.pewinternet.org/2019/01/16/facebook-algorithms-and-personal-data/>. See AUSTL. COMPETITION & CONSUMER COMM'N, DIG. PLATFORMS INQUIRY
 19 FINAL REPORT 11 (2019) [hereinafter Austl. Competition & Consumer Comm'n Report]; Ryan
 20 Calo & Alex Rosenblat, *The Taking Economy: Uber, Information, and Power*, 117 COLUM. L.
 21 REV. 1623 (2017); Dina Srinivasan, *The Antitrust Case Against Facebook: A Monopolist's
 22 Journey Towards Pervasive Surveillance in Spite of Consumers' Preference for Privacy*, 16
 BERKELEY BUS. L.J. 39, 41 (2019) ("[A]ccepting Facebook's policies in order to use its service
 means accepting broad-scale commercial surveillance.").

23 Arvind Narayanan, Arunesh Mathur, Marshini Chetty & Mihir Kshirsagar, *Dark Patterns: Past,
 Present, and Future*, 18(2) ACM QUEUE 67, 77 (2020)
<https://queue.acm.org/detail.cfm?id=3400901>.

24 ⁷⁷ *Id.* at 77 (2020); NORWEGIAN CONSUMER COUNCIL, DECEIVED BY DESIGN (June 27,
 2018) (describing the use of "dark patterns"), <https://fil.forbrukerradet.no/wp-content/uploads/2018/06/2018-06-27-deceived-by-design-final.pdf>.

25 ⁷⁸ House Antitrust Report, at 51-53 & n. 205-21 (citing Jamie Luguri & Lior Strahilevitz, *Shining
 26 a Light on Dark Patterns* at 29 (Univ. of Chicago Public Law Working Paper No. 719, 2019),
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3431205).

1 Cambridge Analytica.^[79] As Dina Srinivasan notes, “Today, nuances in privacy
 2 terms are relegated to investigative journalists to discover and explain. When the
 3 media does report on them—as they did around Google’s practice of letting
 4 employees and contractors read Gmail users’ emails—consumers often switch to a
 5 competitor that offers a better product or service.”^[80] The opacity of data collection
 6 and use contributes to consumer confusion and the misperception that consumers
 7 do not care about their privacy—the so-called privacy paradox—simply because
 8 they use services that have become essential.^[81]

9 225. The House Antitrust Report noted that in digital markets, data privacy and
 10 violations are an indication of monopoly power because product quality is often the relevant “locus
 11 of competition” and anticompetitive practices could lead to a “race to the bottom.” For example:

12 While insufficient competition can lead to reduced quality in many markets, the
 13 loss of quality due to monopolization—and in turn, privacy and data protection—is even more pronounced in digital markets because product quality is often the
 14 “relevant locus of competition.”^[82] Without transparency or effective choice,
 15 dominant firms may impose terms of service with weak privacy protection that are
 16 designed to restrict consumer choice,^[83] creating a race to the bottom.^[84] As David
 17 Heinemeier Hansson, the Co-Founder and Chief Technology Officer of
 18 Basecamp,^[85] explained in his testimony before the Subcommittee:

19

 20⁷⁹ Dig. Competition Expert Panel Report at 45; David N. Cicilline & Terrell McSweeny,
 21 *Competition Is at the Heart of Facebook’s Privacy Problem*, WIRED (Apr. 24, 2018),
 22 <https://www.wired.com/story/competition-is-at-the-heart-of-facebooks-privacy-problem>.

23⁸⁰ Data and Privacy Hearing at 4 (statement of Dina Srinivasan, Fellow, Yale Thurman Arnold
 24 Project).

25⁸¹ Brooke Auxier, et al., *Americans and Privacy: Concerned, Confused and Feeling Lack of
 26 Control Over Their Personal Information*, PEW RES. CTR. (Nov. 15 2019),
 27 [https://www.pewresearch.org/internet/2019/11/15/americans-and-privacyconcerned-confused-
 and-feeling-lack-of-control-over-their-personal-information/](https://www.pewresearch.org/internet/2019/11/15/americans-and-privacyconcerned-confused-

 28 and-feeling-lack-of-control-over-their-personal-information/); Daniel J. Solove, *The Myth of the
 Privacy Paradox*, 89 GEO. WASH. L. REV. (forthcoming 2021).

⁸² Data and Privacy Hearing at 4 (statement of Tommaso Valletti, Prof. of Econ., Imperial College
 Bus. Sch.).

⁸³ *Id.*

⁸⁴ Competitors Hearing at 11 (statement of David Heinemeier Hansson, Co-Founder and CTO,
 Basecamp); Dig. Competition Expert Panel Report at 6 (“[W]ell-functioning competitive digital
 markets have the potential to develop new solutions and increased choice for consumers, where
 privacy and quality of service can be differentiating factors.”); Howard A. Shelanski, *Information,
 Innovation, and Competition Policy for the Internet*, 161 U. PA. L. REV. 1663, 1691 (2013)
 (“Competition, however, may drive platforms to adopt and adhere to stronger privacy policies,
 making it worthwhile for a platform to advertise such policies to consumers in order to differentiate
 itself from its competitors.”).

⁸⁵ Basecamp is an internet software firm based in Chicago, Illinois, that sells project-management

1 When businesses do not have to account for the negative externalities they cause,
 2 it's a race to the bottom. The industrial-scale exploitation of privacy online is much
 3 the same. Facebook and Google have built comprehensive dossiers on almost
 4 everyone, and they can sell incredibly targeted advertisement on that basis. When
 5 Facebook knows you're pregnant, or worse, thinks it knows when you're pregnant,
 6 they can target ads for baby clothes or strollers with striking efficiency. But doing
 7 so represents an inherent violation of the receiver's privacy. Every ad targeted using
 8 personal information gathered without explicit, informed consent is at some level a
 9 violation of privacy. And Facebook and Google are profiting immensely by selling
 10 these violations to advertisers. Advertisers who may well feel that purchasing these
 11 violations go against their ethics, but see no choice to compete without
 12 participating.^[86]

13 In addition to creating a race to the bottom, this same dynamic can also prevent new
 14 firms from offering products with strong privacy protections or reduce the incentive
 15 of new entrants or rivals to compete directly.^[87]

16 226. The House Antitrust Report cited to opinions from antitrust regulators across the
 17 globe, including in the U.S., for the proposition that alleged data-privacy misuse can be a proxy
 18 for an anticompetitive price hike. For example:

19 Federal Trade Commissioner Rohit Chopra testified that dominant firms have the
 20 ability to impose "complex and draconian" terms of service that can change
 21 suddenly "to collect and use data more expansively and more intensely."^[88] As he
 22 noted, this behavior is the equivalent of a price hike that would be difficult to
 23 impose unilaterally in a competitive marketplace.^[89] Without sufficient
 24 competition, however, "companies can focus on blocking new entrants and limiting
 25 choice to protect their dominance and pricing power."^[90] Tommaso Valletti, the
 26 former Chief Competition Economist for the European Commission, noted that it
 27 is "self-evident that data is key to digital platforms, and that some applications
 28 imply real-time knowledge of consumer behaviour as well as cross linkages across

29 and team-collaboration tools. Competitors Hearing at 2 (statement of David Heinemeier Hansson,
 30 Co-Founder and CTO, Basecamp).

31 ⁸⁶ Competitors Hearing at 11 (statement of David Heinemeier Hansson, Co-Founder and CTO,
 32 Basecamp).

33 ⁸⁷ House Antitrust Report, at 54-55 & n. 223-21 (citing Data and Privacy Hearing at 3-4 (statement
 34 of Dina Srinivasan, Fellow, Yale Thurman Arnold Project); Venture Capital and Antitrust
 35 Workshop at 24 (Paul Arnold, Founder and Partner, Switch Partners)).

36 ⁸⁸ Data and Privacy Hearing at 3 (statement of Rohit Chopra, Comm'r, Fed. Trade Comm'n).

37 ⁸⁹ *Id.*

38 ⁹⁰ *Id.*

1 apps that only very few digital players have access to.”^[91] And finally, Jason
 2 Furman, the former Chairman of the Council of Economic Advisers and an author
 3 of the “Unlocking Digital Competition” report, said that “the misuse of consumer
 4 data and harm to privacy is arguably an indicator of low quality caused by a lack
 5 of competition.”^[92]

6 At the Subcommittee’s oversight hearing in November 2019, Makan Delrahim, the
 7 Assistant Attorney General of the Justice Department’s Antitrust Division, testified
 8 that because privacy is a dimension of quality, protecting competition “can have an
 9 impact on privacy and data protection.”^[93] And finally, Maureen Ohlhausen, the
 10 former Acting Chair of the FTC, echoed this point at the Subcommittee’s hearing
 11 on innovation and entrepreneurship, noting that quality reductions online could
 12 “include factors such as reduced features, restricted consumer choice, or lessened
 13 control over privacy.”^[94] [House Antitrust Report, at 56, n. 236-42.]

14 227. The House Antitrust Report found that in the context of digital markets, platforms
 15 can demonstrate monopoly power through data extraction. For example:

16 By virtue of functioning as the only viable path to market, dominant platforms
 17 enjoy superior bargaining power over the third parties that depend on their
 18 platforms to access users and markets. Their bargaining leverage is a form of
 19 market power,^[95] which the dominant platforms routinely use to protect and
 20 expand their dominance.

21 Through its investigation, the Subcommittee identified numerous instances in
 22 which the dominant platforms abused this power. In several cases, dominant
 23 platforms used their leverage to extract greater money or data than users would be
 24 willing to provide in a competitive market. While a firm in a competitive market
 25 would lose business if it charged excessive prices for its goods or services because
 26 the customer would switch to a competitor, dominant platforms have been able to
 27 charge excessive prices or ratchet up their prices without a significant loss of
 28 business. Similarly, certain dominant platforms have been able to extort an ever-
 increasing amount of data from their customers and users, ranging from a user’s
 personal data to a business’s trade secrets and proprietary content. In the absence

22 ⁹¹ Data and Privacy Hearing at 2 (statement of Tommaso Valletti, Prof. of Econ., Imperial College
 23 Bus. Sch.).

24 ⁹² Dig. Competition Expert Panel Report at 43.

25 ⁹³ Antitrust Agencies Hearing at 15 (statement of Makan Delahim, Assistant Attorney General,
 26 United States Dep’t of Justice Antitrust Div.).

27 ⁹⁴ House Antitrust Report, at 56 & n. 236-42 (citing Innovation and Entrepreneurship Hearing at
 28 4 n.14 (statement of Maureen K. Ohlhausen, Partner, Baker Botts, L.L.P.)).

29 ⁹⁵ Aviv Nevo, Deputy Assistant Att’y Gen. for Econ., Dep’t of Justice, Antitrust Div., “Mergers
 30 that Increase Bargaining Leverage,” Remarks at the Stanford Institute for Economic Policy
 31 Research, 7 (Jan. 22, 2014), <https://www.justice.gov/atr/file/517781/download> (“[A]s a matter of
 32 economic theory and case law bargaining leverage is a source of market power.”).

1 of an alternative platform, users effectively have no choice but to accede to the
 2 platform's demands for payment whether in the form of dollars or data.⁹⁶

3 228. But for the anticompetitive practices alleged herein, which are negative tying,
 4 exclusive dealing, self-preferencing, and monopolization, there would have been more
 5 meaningful competition from competitors in the relevant antitrust products markets of the
 6 Digital Maps API Market, Digital Places API Market, and Digital Routes API Market, which
 7 would have reined in Defendants' alleged data-privacy violations.

8 *The House Antitrust Report Details Google's Monopoly Power Through Circumstance*

9 229. Based on (i) the findings in the House Antitrust Report, (ii) analysis of industry
 10 participants and analysts' websites, and (iii) Plaintiffs Dream, Getify, and Sprinter's experiences
 11 as direct purchasers or direct expenders of monetary credits of Maps APIs, Places APIs, and
 12 Routes APIs, Plaintiffs allege that Google Maps has over 90% market share in the Digital Maps
 13 API Market.

14 230. According to the House Antitrust Report, "Google **dominates** the market for
 15 digital maps with over a billion users."⁹⁷

16 231. The House Antitrust Report found that in the directly relevant "business-to-
 17 business" segment, which Plaintiffs allege and define as that concerning Google Maps and its
 18 competitors supplying digital-mapping to Plaintiffs and Class members, "Google Maps API"
 19 has over 90% market share. A reasonable interpretation of this language—indeed, its express
 20 language—in the House Antitrust Report is that Google Maps has monopoly power over the
 21 Digital Maps API Market. Reviewing the included portions of the House Antitrust Report, as
 22 restated below, supports Plaintiffs' allegations.

23 232. And reviewing the included portions of the House Antitrust Report, as pasted
 24 below, supports Plaintiffs' allegations and definition of the "turn-by-turn navigation" segment
 25 referring to the independent and indirectly relevant tools for personal navigation, for which

27 ⁹⁶ House Antitrust Report, at 390 & n. 2,463.
 28 ⁹⁷ House Antitrust Report, at 230 (emphasis added).

1 individual consumers can search for digital-mapping, traffic, and navigational tools either
 2 through a standalone, turn-by-turn navigation app that licenses the underlying data, such as
 3 MapQuest or Bing Maps, or through a vertically integrated provider, such as through the brands
 4 Google Maps or Waze, both of which Defendants own.

5 233. The portions from the House Antitrust Report referred to that provide the context
 6 and support for Plaintiffs' allegations and definitions follow:

7 Through Google Maps, ***Google now captures over 80% of the market for***
navigation mapping service—a key input over which Google consolidated control
 8 through an anticompetitive acquisition and which it now leverages to advance its
 9 position in search and advertising. And through Google Cloud, Google has another
 10 core platform in which it is now heavily investing through acquisitions, positioning
 11 itself to dominate the “Internet of Things,” the next wave of surveillance
 12 technologies.⁹⁸

13 * * *

14 There are two sets of customers for mapping services: consumers, who use map
 15 products for ***navigation***, and ***businesses***, who use underlying mapping libraries and
 16 design tools to produce customized maps.⁹⁹

17 * * *

18 Waze, which developed ***navigable*** maps by relying on driver-generated live maps
 19 and crowd-sourced updates, was an additional mapping provider purchased by
 20 Google in June 2013.¹⁰⁰

21 Consumer-facing providers of mapping services license map databases and layer
 22 search and traffic technologies atop of the map data. Consumers use these search
 23 and traffic tools either through a standalone ***turn-by-turn navigation*** service that
 24 licenses the underlying data—like MapQuest or Bing Maps—or through a
 25 vertically integrated provider, like Google Maps, Waze, or Apple Maps.¹⁰¹

26 * * *

27 ***Business-facing*** providers serve map design tools and mapping libraries required
 28 to produce customized maps. The leading providers of ***business-to-business***
 29 mapping software are Google, HERE, Mapbox, and TomTom, followed by Apple

26 ⁹⁸ House Antitrust Report, at 15.

27 ⁹⁹ *Id.* at 107.

28 ¹⁰⁰ *Id.*

¹⁰¹ *Id.*

1 Maps, Bing, ESRI, Comtech, and Telenav. Some of these providers operate in more
 2 specialized markets. For example, HERE and TomTom primarily serve automotive
 3 customers, while ESRI provides desktop GIS software used by governments and
 spatial analysts.”¹⁰²

4 * * *

5 Similarly, the list of leading providers of ***consumer mapping services*** and
 6 ***business-to-business services*** has mostly been unchanged since 2013.¹⁰³

7 * * *

8 ***Between Google Maps and Waze—which Google also owns—the corporation***
 9 ***captures an estimated 80% of the navigation app market.***¹⁰⁴

10 * * *

11 In 2009, Google introduced Google Maps for Mobile, a ***navigation service***
 12 ***featuring turn-by-turn*** directions, live traffic updates, and automatic rerouting.¹⁰⁵

13 * * *

14 In 2013, Google purchased Waze, an Israeli crowd-sourced mapping provider, for
 15 \$1.3 billion. The acquisition solidified Google’s ***dominance in turn-by-turn***
navigation, eliminating its only meaningful competitive threat.¹⁰⁶

16 * * *

17 ***Google Maps is the dominant provider of mapping data and turn-by-turn***
 18 ***navigation services.*** The company declined to provide the Committee with
 19 information about the market share captured by Google Maps. ... According to a
 20 third-party estimate, however, Google Maps combined with Waze captures ***81% of***
the market for turn-by-turn navigation services.¹⁰⁷ ... One market participant,

21 ¹⁰² *Id.* at 108 & n. 578, 580.

22 ¹⁰³ *Id.* at 109.

23 ¹⁰⁴ House Antitrust Report, at 230, n. 1,377 (citing MARC S.F. MAHANEY, ROYAL BANK OF
 24 CANADA CAP. MKTS., ALPHABET INC.: DIGGING FOR BURIED TREASURE – THE
 GOOGLE MAPS OPPORTUNITY 5 (Sept. 23, 2019) (on file with the House Antitrust
 Subcommittee)).

25 ¹⁰⁵ House Antitrust Report, at 232, n. 1,394.

26 ¹⁰⁶ *Id.* at 233.

27 ¹⁰⁷ House Antitrust Report, at 234, n. 1,410 (citing MARC S.F. MAHANEY, ROYAL BANK OF
 28 CANADA CAP. MKTS., ALPHABET INC.: DIGGING FOR BURIED TREASURE – THE
 GOOGLE MAPS OPPORTUNITY 4 (Sept. 23, 2019) (on file with House Antitrust
 Subcommittee)).

1 meanwhile, estimated that ***Google Maps API captures over 90% of the business-***
 2 ***to-business market.***¹⁰⁸

3 * * *

4 In acquiring Waze, Google bought out one of the few companies in the world
 5 **making navigable maps while also providing turn-by-turn navigation**
 6 **service.**¹⁰⁹

7 * * *

8 Since completing the Waze acquisition, Google has reportedly come to capture
 9 81% of the market for ***navigation mapping services.***^[110] Despite Google's claims
 10 that entry barriers were low and alternate offerings abundant, no meaningful
 11 competitor has emerged since Google acquired Waze. Based on the materials the
 12 FTC provided to the Subcommittee, it is unclear whether the Commission fully
 13 assessed the barriers to entry. It instead appears the FTC primarily took a static
 14 view—focusing on the existing quality of Waze's maps—rather than assessing the
 15 dynamic effects of the acquisition.¹¹¹

16 * * *

17 ***Business-facing*** mapping products usually consist of a core set of features to
 18 provide greater mapping functionality. For example, the “Google Maps Platform”
 19 offers developers traffic data and places data (also known as place search) as well
 20 as map data.¹¹²

21 234. Read in totality and in context, the above excerpts support Plaintiffs' allegations
 22 and definition that in the directly relevant “business-to-business” segment and the Digital Maps
 23 API Market, Google possess monopoly power with market share above 90%.

24 108 House Antitrust Report, at 234, n. 1,411 (citing Submission from Source 564, to House
 25 Antitrust Subcommittee, 2 (Nov. 13, 2019) (on file with the House Antitrust Subcommittee)).

109 House Antitrust Report, at 236.

110 House Antitrust Report, at 239, n. 1,456 (citing MARC S.F. MAHANEY, ROYAL BANK OF
 26 CANADA CAP. MKTS., ALPHABET INC.: DIGGING FOR BURIED TREASURE – THE
 27 GOOGLE MAPS OPPORTUNITY 5 (Sept. 23, 2019) (on file with House Antitrust
 28 Subcommittee)).

111 House Antitrust Report, at 239, n. 1,455.

112 House Antitrust Report, at 240, n. 1,465 (citing *Google Maps Platform Terms of Service*, 21.
 28 Definitions, GOOGLE ... (“Google Maps Content” means any content provided through the
 Service (whether created by Google or its third-party licensors), including map and terrain data,
 imagery, traffic data, and places data (including business listings.”)).

1 235. And read in totality and in context, in the indirectly relevant “turn-by-turn
 2 navigation” segment referring to the independent tools of personal, consumer navigation,
 3 Defendants, which own Google Maps and Waze, have a market share above 80%.

4 236. Defendants’ monopoly share of over 80% in the indirectly relevant “turn-by-turn
 5 navigation” tools concerning consumers is still supportive of Plaintiffs’ directly relevant
 6 allegations of Google Maps’ monopoly share of over 90% in the Digital Maps API Market.

7 237. The indirectly relevant market share allegation of over 80% is helpful to
 8 Plaintiffs’ allegations because it is reasonable to infer that the monopoly share of Google Maps
 9 and Waze, both owned by Defendants, over how consumers use digital-mapping tools for turn-
 10 by-turn navigation aids in Google Maps’ monopoly power in the Digital Maps API Market.

11 238. Defendants’ monopoly share of the “turn-by-turn navigation” tools, along with
 12 Google Maps’ default placement on Android-operated mobile devices, adds further ammo for
 13 Google Maps to block digital-mapping competitors in the relevant antitrust products markets by
 14 disabling competitors from having access to location data, real-time navigation data, usage data,
 15 and other types of data that help build scale to aid the digital-mapping offerings of maps APIs,
 16 places APIs, and routes APIs.

17 239. Defendants’ monopoly share of over 80% in the indirectly relevant “turn-by-turn
 18 navigation” tools concerning consumers helps support the allegations of Google Maps’
 19 monopoly power in the Digital Maps API Market.

20 240. That the House Antitrust Report relied on a confidential source who is a market
 21 participant to support the over-90% market-share figure does not discount the probative value
 22 that this offers to Plaintiffs and Class members’ claims. Quite the opposite: it is reasonable to
 23 allege that the House Antitrust Subcommittee conducted a thorough investigation and would not
 24 have included such a point in the House Antitrust Report on a whim and without sufficient
 25 support. That this confidential source is a market participant adds support to the point; indeed,
 26 retained experts are often market participants.

27 241. Google Maps’ over 90% market share and other circumstantial evidence of
 28

1 monopoly power is consistent with each of Plaintiffs Dream, Getify, and Sprinter’s observations
 2 and experiences in dealing with digital mapping and the technology industry more broadly.
 3 These circumstantial allegations of Google Maps’ monopoly power are consistent with industry
 4 participants and analysts’ observations.

5 242. While Defendants may attempt to discredit the fact of Google Maps’ market share,
 6 the House Antitrust Report itself notes that Google claimed, straining credulity, that “it doesn’t
 7 maintain information in the normal course of business about market share[.]”

8 *The House Antitrust Report Further Details Google’s Monopoly Power Due to Strong
 9 Barriers to Entry*

10 243. Google Maps’ monopoly power—or alternatively and at the least, Google Maps’
 11 sufficient market and economic power—is durable due to significant barriers to entry.

12 244. The significant barriers to entry in the relevant antitrust products markets have
 13 been erected, in part, through Defendants’ own actions.

14 245. The House Antitrust Report stated that commenting on Google Maps’
 15 monetization potential, an analyst stated that Google Maps has “sustainable moats.”¹¹³

16 246. The barriers to entering the relevant antitrust products markets are significant
 17 because of high fixed costs, network effects, lock in, high switching costs, access to data, market
 18 tipping, and Defendants’ alleged anticompetitive activity that shackle Plaintiffs and Class
 19 members, exclude competitors, and threaten innovation.

20 247. According to the House Antitrust Report, “[s]everal factors suggest that Google
 21 Maps is well positioned to **maintain its dominance**. The high fixed costs of creating mapping
 22 data pose a significant barrier to entry.”¹¹⁴

23 248. Building a database to provide maps APIs, places APIs, and routes APIs business-

25 ¹¹³ House Antitrust Report, at 234-35, n. 1,416-417 (citing MARC S.F. MAHANEY, ROYAL
 26 BANK OF CANADA CAP. MKTS., ALPHABET INC.: DIGGING FOR BURIED TREASURE
 27 – THE GOOGLE MAPS OPPORTUNITY 10–11 (Sept. 23, 2019)) (on file with House Antitrust
 Subcommittee).

28 ¹¹⁴ House Antitrust Report, at 234.

1 to-business—to Plaintiffs and Class members—requires high fixed costs and is time-intensive,
 2 requiring significant investment in mapping technologies and data collection to the tune of billions
 3 of dollars.

4 249. Market participants have noted that Defendants have had the enormous advantage
 5 to have invested heavily with “unlimited funds” in digital-mapping databases and technology.

6 250. Mapping data can be gathered through the collection of imagery from satellites
 7 and streets, the tracking of GPS traces, and the collation of public domain mapping data.

8 251. Google Maps allegedly benefitted from the Google Street View initiative, which
 9 as alleged elsewhere was perpetuated in violation of data-privacy laws. Competitors are alleged
 10 to be unable to use similar methods to build digital-mapping databases because those methods
 11 are allegedly unlawful. And in part to help Defendants amass the Google Maps empire, Google
 12 acquired several digital-mapping competitors, including, without limitation, Waze in 2013.

13 **F. Regulators' Antitrust Investigations, Including DOJ Antitrust and GFCO**

14 252. Around late-March 2022, media started reporting that DOJ-Antitrust has breathed
 15 new life into an investigation of Google Maps and whether Google illegally stifles competition,
 16 according to two sources familiar with the matter.

17 253. The probe reportedly has two components.

18 254. One component focuses on app and website developers. DOJ-Antitrust is reported
 19 to be investigating Google’s requirement that if an app or website uses Google Maps’
 20 technology, the app or website developer cannot use digital-mapping APIs developed by
 21 Google’s rivals, the two sources said. If developers use Google’s digital-mapping APIs, they
 22 cannot use competitors’ digital-mapping APIs.

23 255. Media referenced as a catalyst to the investigation the House Antitrust
 24 Subcommittee’s conclusion that Google “enforces this provision [of the TOS] aggressively” and
 25 “effectively forcing them to choose whether they will use all of Google’s mapping services or

1 none of them.”¹¹⁵

2 256. Media specifically references the Terms of Service and states that it disables apps,
 3 websites, or other companies from combining Google Maps’ digital-mapping APIs with any
 4 competitor’s digital-mapping APIs, that one cannot even show Google Maps’ digital-mapping
 5 APIs on the same screen as a competitor’s digital-mapping APIs, and that one cannot link
 6 Google Maps’ digital-mapping APIs to competitors’ digital-mapping APIs.

7 257. Media reported that two developers have told Reuters (for example) over 2021
 8 and 2022 that the two developers have received violation notices from Google in recent years
 9 after mixing data from the Google Maps APIs with digital-mapping APIs from competitors. The
 10 developers said that competing options were less expensive, better, or more detailed than Google
 11 Maps in some cases.

12 258. Media reported that the developers spoke on the condition of anonymity due to
 13 fear of retaliation by Google. They also expressed concern about Google’s privacy options that
 14 could limit data collection by rival digital-mapping providers.

15 259. Another component focuses on apps, including for navigation, which are provided
 16 through infotainment screens in vehicles. One source stated that in the Google Automotive
 17 Services package for automakers, Google bundles together Maps, the Google Play app store,
 18 Google Assistant, and other services. The sources stated that automotive companies are
 19 prevented from, for example, mixing Google Maps with voice assistants developed by smaller
 20 rivals. Media reported that an arm of this component also includes Android Automotive, which
 21 is a full operating system that manufacturers can ship on their cars. Google bundles its apps on
 22 Android Automotive. According to media, Google Maps is a crucial app in an automotive, but
 23 if manufacturers use Google Maps, they cannot use competitors’ APIs, and Google requires
 24 automotive companies to also take the Play Store, Google Assistant, YouTube Music, and any
 25 other automotive apps that Google makes.

26
 27
 28 ¹¹⁵ See House Antitrust Report, at 241.

1 260. Media reported that at stake are money and data, including places and people's
 2 interests. Google does not separately disclose sales from licensing digital-mapping tools. But
 3 Google over the years has hiked mapping fees and tied the business to its Cloud unit.

4 261. Media reported that the enduring use of Google Maps' digital-mapping APIs
 5 enables Google to collect more data to maintain its dominance over competing options.

6 262. Media reported that the DOJ may be hampered in wrapping up the Google Maps
 7 probe because it has been swamped by existing lawsuits by the DOJ against Google for breaking
 8 antitrust laws, including, without limitation, to maintain its dominance of digital search products
 9 and digital search advertising, an unusually large number of merger reviews and merger-related
 10 trials, and other priorities.

11 263. Starting around late-June 2022, media reported that the German government's
 12 antitrust enforcer, the GFCO or the Bundeskartellamt, opened a proceeding against Google for
 13 alleged anticompetitive restrictions in connection with Google Maps. The GFCO issued a press
 14 release around June 21, 2022, stating that the initiated proceeding examines possible
 15 anticompetitive restrictions imposed by the Google Maps Platform to the detriment of
 16 alternative digital-mapping providers.

17 264. Media reported that the investigation does not concern Google's direct interaction
 18 with consumers (typically individuals) who use the Google Maps app; instead, it concerns
 19 Google's business-focused digital-mapping tools that allow others (typically developers or
 20 business owners) to build their own digital maps on apps or websites. Media reported that
 21 because Google Maps' TOS hinder those who use Google Maps APIs from combining them
 22 with other digital-mapping tools, the GFCO sees this as potentially anticompetitive.

23 265. Media also reported that the GFCO is investigating whether the Android
 24 Automotive Services framework, Google's operating system for automobiles, severely limits
 25 which other services automobile manufacturers use.

26 266. Mr. Andreas Mundt, the GFCO's president at that time, has been quoted to make
 27 a statement to the following effect: "As a company of paramount significance for competition
 28

1 across markets, Google is subject to stricter abuse control. We have information to suggest that
 2 Google may be restricting the combination of its own map services with third-party map
 3 services[.] Among other aspects, we will now examine whether this practice could allow Google
 4 to further expand its position of power regarding certain map services. We will also look into
 5 the licencing terms and conditions for the use of Google's map services in vehicles.”¹¹⁶

6 267. The GFCO reported that applications of Google's digital-mapping APIs include
 7 embedding digital maps onto third-party websites, for example, to show the locations of shops
 8 or hotels. Its preliminary assessment is that Google restricts, in particular, the possibility to
 9 combine Google's digital-mapping tools with third-party's digital-mapping tools. According to
 10 the GFCO, this practice could impair competition in the area of digital-mapping.

11 268. The GFCO reported that the fact that Google makes the use of its tools used in
 12 vehicle infotainment systems subject to very strict terms of use applicable to its Google
 13 Automotive Services could restrict competition even further.

14 *Defendants' Documented History of Antitrust Misconduct*

15 269. Defendants are no strangers to alleged antitrust violations, especially in terms of
 16 using market power, agreements, terms of service, and coercion to effectuate tying and other
 17 alleged anticompetitive actions.

18 270. On September 13, 2022, the Honorable Judge P. Kevin Castel of the United States
 19 District Court for the Southern District of New York in the *In re Google Digital Advertising*
 20 *Antitrust Litigation*, sustained, in part, antitrust claims under Sections 1 and 2 of the Sherman
 21 Act (15 U.S.C. §§ 1-2) for tying, where the tying product was the Google ad exchange (AdX),
 22 and the tied product was Google's ad server for publishers, which has been known as
 23 DoubleClick for Publishers (DFP) and Google Ad Manager GAM). *See In re Google Digital*
 24 *Advertising Antitrust Litig.*, Nos. 21-md-3010 (PKC), 21-cv-6841 (PKC), 2022 WL 4226932,

25
 26
 27 ¹¹⁶ See, e.g.,
 28 https://www.bundeskartellamt.de/SharedDocs/Publikation/EN/Pressemitteilungen/2022/21_06_2022_Google_Maps.pdf?__blob=publicationFile&v=2.

1 at *3, 6, 10-12, 40 (S.D.N.Y. Sept. 13, 2022). The findings were based, in part, on there having
 2 been plausible allegations that these were separate products in separate markets and that Google
 3 used its contracts or coercion against the publishers, despite Google's counter-arguments that
 4 publishers were merely required to enter into contracts that permitted them to decide whether to
 5 include either or both of the products. *See id.*, 2022 WL 4226932, at *3, 6, 10-12, 40.

6 271. Also on July 29, 2022, the Honorable Judge Haywood S. Gilliam, Jr. of the United
 7 States District Court for the Northern District of California in *Rumble, Inc. v. Google LLC*
 8 sustained antitrust claims under Section 2 of the Sherman Act (15 U.S.C. § 2) for allegations,
 9 viewed in totality, in the online video platform market of self-preferencing, tying of the
 10 YouTube app to other Google apps, and unlawfully dominating the search market with
 11 agreements involving distribution of Google's search product. *See Rumble, Inc. v. Google LLC*,
 12 No. 21-cv-0029-HSG, 2022 WL 3018062, at *1-4 (N.D. Cal. July 29, 2022).

13 272. Recently around December 18, 2023, in the *In re Google Play Store Antitrust*
 14 *Litigation*, No. 3:21-cv-05227-JD (N.D. Cal.), Google agreed to settle the matter with State
 15 Attorneys General for a total financial commitment of approximately \$700,000,000, in
 16 connection with allegations based, in part, on anticompetitive activity concerning control over
 17 the Google Play Store for Android apps.

18 **G. Additional Allegations Supporting Specific Types of Antitrust Misconduct**

19 **1. The Tying and Tied Products Subject to the Negative Tying**

20 273. Pursuant to the Court's Order in this Action on November 30, 2023 (ECF No. 67,
 21 at 5-8), Plaintiffs focus the negative tying claim on Google Maps using its Maps APIs as the
 22 tying product, and its Places APIs and Routes APIs as the negatively tied products.

23 274. Once Plaintiffs and Class members use Google's Maps APIs to form the base of
 24 a digital map on Plaintiffs and Class members' apps or websites, Defendants condition such use
 25 on Plaintiffs and Class members not using or linking a competitor's places APIs nor routes APIs,
 26 despite preferences to use competitors' places APIs or routes APIs. As a result, if Plaintiffs and
 27 Class members want to use or link places API or routes APIs, they must unwillingly use
 28

1 Google's Places APIs or Routes APIs. And as a result, if Plaintiffs and Class members want to
 2 use or link places APIs or routes APIs but cannot afford Google's Places APIs or Routes APIs
 3 or otherwise do not want to use Google Maps' Places or Routes APIs, they are forced not to use
 4 places APIs or routes APIs *at all*.

5 275. For most Plaintiffs and the Class, the initial digital-mapping API to form the base
 6 of a digital map are maps APIs. Google's Maps APIs thus are alleged to be the tying product.
 7 The overwhelmingly dominant provider in the Digital Maps API Market is Google Maps, with
 8 above 90% market share. Plaintiffs and the Class cannot feasibly avoid Google's Maps APIs in
 9 totality because of Google Maps' alleged monopoly share of above 90%, the barriers to entry
 10 (that Google, in part, helped erect) that keep existing competitors and potential new ones at bay,
 11 and the sheer data advantage that Google has, especially in connection with its Maps APIs,
 12 considering, for example, the cross-app data sharing within the panoply of Google's other apps
 13 and tools, and with Google Maps being a default app on Android mobile phones, which gives
 14 Google Maps an additional advantage over competitors.

15 276. Google's Maps APIs are the tying product, and Google's Places APIs and Routes
 16 APIs are the negatively tied products. Once Plaintiffs and Class members purchase or expend
 17 monetary credits for Google's Maps APIs, they cannot purchase or use competitors' places APIs
 18 or routes APIs, despite preferences to use competitors' places APIs or routes APIs that are
 19 alleged to offer even better quality, that are alleged to be materially cheaper, and are even alleged
 20 to be offered for free.

21 277. This negative tying is imposed in Google Maps' Terms of Service.

22 278. In addition, this negative tying is imposed through Defendants' coercion.

23 279. This negative tying has affected a substantial volume of commerce in each of the
 24 Digital Maps API Market, the Digital Routes API Market, and the Digital Places API Market.
 25 This negative tying has foreclosed substantial competition in each of Maps APIs, Places APIs,
 26 and Routes APIs. It has caused a pernicious effect on commerce throughout the U.S.

27 280. The House Antitrust Report includes detailed factual allegations supporting the

1 negative tying.

2 281. Each of Plaintiffs Dream, Getify, and Sprinter has experienced anticompetitive
 3 harm, suffered monetary damages, damages through reduced monetary-credit value, and other
 4 damages.

5 **2. Exclusive Dealing**

6 282. Once Plaintiffs and Class members purchase or expend monetary credits for
 7 Google's Maps APIs, Defendants forbid them from using any of competitors' places APIs or
 8 routes APIs. This results in Plaintiffs and Class members only being able to purchase or expend
 9 monetary credits for Google's Maps APIs, Places APIs, or Routes APIs when using any of them.

10 283. This results in Defendants enforcing exclusive dealing through Google Maps.

11 284. Google Maps improperly imposes the Terms of Service that explicitly, implicitly,
 12 and practically result in when Plaintiffs or Class members purchase or expend monetary credits
 13 for Google's Maps API, then Plaintiffs and Class members are forbidden from purchasing,
 14 using, or linking any of competitors' places APIs nor routes APIs on the same app, webpage,
 15 website, digital screen, or other type of digital display. If Plaintiffs and Class members want to
 16 use and link places APIs or routes APIs other than those from Google Maps, they cannot.
 17 Plaintiffs and Class members are then forced to purchase or expend monetary credits for the
 18 unwanted Google's Places APIs and Routes APIs, which they preferred to use from competitors.
 19 Or if Plaintiffs and Class members cannot afford the unwanted Google's Places APIs or Routes
 20 APIs, or otherwise do not want to use them because of poor quality issues, then Plaintiffs and
 21 Class members cannot purchase, use, or link places APIs or routes APIs from any competitors,
 22 period. This results in Plaintiffs and Class members being exclusively locked into the Google
 23 Maps ecosystem.

24 285. In addition, although not required to be shown because Google Maps' Terms of
 25 Service as alleged herein expressly includes the negative tying provision and Plaintiffs well-
 26 plead monopoly power, coercion is alleged through the several examples alleged herein and
 27 those referenced in the House Antitrust Report of Defendants intimidating and bullying

1 developers to switch entirely to Google's Maps APIs, Places APIs, and Routes APIs, to the
 2 exclusion of competitors' maps APIs, places APIs, and routes APIs, which were preferred.

3 286. These onerous effects on an appreciable number of Class members (and all of the
 4 Plaintiffs), in addition to the factual allegations made elsewhere concerning Google Maps'
 5 monopoly power (or in the alternative and at the least, its sufficient market and economic
 6 power), demonstrates coercion and exclusive dealing.

7 287. Google has monopoly power in the Digital Maps API Market, so all Plaintiffs and
 8 Class members are subjected to this exclusive dealing, as they are subject to the Google Maps
 9 Terms of Service that enforces the negative tying that effectuates the exclusive dealing, harms
 10 competition, and affects a substantial amount of commerce.

11 288. During the Class Period, Plaintiffs were forced to purchase or expend monetary
 12 credits exclusively on Google's Maps APIs, Places APIs, and Routes APIs.

13 289. The House Antitrust Report noted several instances of exclusive dealing.

14 290. According to the House Antitrust Report, several developers using Google Maps
 15 have told the House Antitrust Subcommittee that Google has been imposing anticompetitive
 16 restrictions as it has gained a more-dominant market position. Google has ratcheted up its
 17 prohibitions against app developers.¹¹⁷

18 291. The House Antitrust Report noted that in "practice, Google's contractual
 19 provision has led several major companies to switch entirely to Google's ecosystem, even in
 20 cases where they preferred mapping services from a non-Google provider, such as Mapbox."¹¹⁸

21 292. "According to one firm, Google closely tracks and pressures developers who use
 22 Google's place data in conjunction with mapping data from a non-Google firm, effectively
 23 forcing them to choose whether they will use all of Google's mapping services or none of
 24 them."¹¹⁹

25
 26

 27¹¹⁷ See, e.g., House Antitrust Report, at 234-35, 239-47.
 28¹¹⁸ House Antitrust Report, at 241.
¹¹⁹ *Id.* (citing Interview with Source 572 (Sept. 24, 2020)).

1 293. “Because Google’s monopoly in online search has furnished it with a trove of
 2 data, as well as a robust index, its place search feature is also seen by many market participants
 3 effectively as a must-have. One market participant that has lost business partnerships due to
 4 Google’s coercive restrictions stated that Google is ‘using access to its dominant search products
 5 as leverage to intimidate businesses out of working with other map providers.’ . . . He noted that
 6 Google’s conduct now threatens his firm’s survival, saying, ‘This is existential for us.’”¹²⁰

7 294. The anticompetitive ramifications of the exclusive dealing are exemplified by
 8 even behemoth companies being beholden to Google Maps, such as Ford, Lyft, and Uber, which
 9 was described in the House Antitrust Report.¹²¹

10 295. During the Class Period, Alphabet has owned equity shares of Lyft and Uber.

11 296. The House Antitrust Report indicated that the ride-sharing company Lyft has cited
 12 its use of Google Maps as a potential risk to its business model. Lyft stated in a securities filing
 13 that “[s]ome of our competitors or technology partners may take actions which disrupt the
 14 interoperability of our platform with their own products or services.”¹²²

15 297. In 2019, Uber disclosed that it relied on Google Maps for “the mapping function
 16 that is critical to the functionality” of its platform.¹²³ Uber disclosed that from January 1, 2016,
 17 through December 31, 2018, the company had paid Google \$58 million for use of Google
 18 Maps.¹²⁴

19 298. Google in 2020 executed a juggernaut of an exclusive-dealing arrangement with
 20 Ford that is slated to span six years, entails several billions of dollars, and not only locks Ford
 21 into Google Maps and Google Automotive Services, but also obligated Ford to use the Google
 22 Cloud Platform (“GCP”), rather than staying with Microsoft Azure. Mapbox’s Gunderson
 23 testified about the threat of exclusive dealing with Google Maps, noting the deal between

25 ¹²⁰ *Id.* at 241-242, n. 1,469-1,470 (citing Interview with Source 572 (Sept. 24, 2020)).

26 ¹²¹ *Id.* at 39-40, 235.

27 ¹²² *Id.* at 39.

28 ¹²³ *Id.* at 235.

29 ¹²⁴ *Id.* at 235.

1 Google Maps and Ford as an example.

2 299. Recent news has revealed that automakers through the Google Automotive
 3 Services package face a bundled together package of Google digital-mapping APIs, the Google
 4 Play application store, Google Assistant, and other products and tools. For example, car
 5 companies are prevented from mixing Google Maps digital-mapping APIs with voice assistants
 6 developed by smaller rivals.

7 300. That Plaintiffs, the Class, and such massive companies face the negative tying and
 8 exclusive dealing to wall them into the Google Maps' ecosystem (as recognized by the House
 9 Antitrust Report), plus the allegations of direct demonstrations of monopoly power and the
 10 circumstantial allegations of Google Maps' over-90% market share in the Digital Maps API
 11 Market, demonstrate that the exclusive dealing has substantially foreclosed competition. These
 12 anticompetitive restrictions result in preventing the over-90% of the market of buyers of Google
 13 Maps APIs from purchasing places APIs or routes APIs from competitors, thus walling them
 14 into the Google Maps ecosystem and forcing them to purchase only Places APIs or Routes APIs
 15 from Google Maps or not use places APIs nor routes APIs at all—this indeed prevents those
 16 buyers from purchasing these products from competitors. This is foreclosure of well more than
 17 a substantial share of the market.

18 301. Any argument that even under the Terms of Service, Plaintiffs and Class members
 19 can develop an entirely separate and unlinked digital map using maps APIs, places APIs, or
 20 routes APIs from competitors in addition to an entirely separate and unlinked digital map using
 21 the Maps APIs, Places APIs, or Routes APIs from Google Maps contradicts economic reality,
 22 practicality, and beneficial use to Plaintiffs, Class members, and their customers or potential
 23 customers. This is consistent for each of Plaintiffs Dream, Getify, and Sprinter.

24 302. In terms of apps or websites, Plaintiffs and Class members purchase or expend
 25 monetary credits for Google's Maps APIs, Places APIs, or Routes APIs, all in order to use and
 26 link them together on one app, on one webpage, on one website, or on one other type of digital
 27 display or screen for Plaintiffs and Class members' customers or potential customers to view on

1 one app, on one webpage, on one website, or on one other type of digital display or screen. This
 2 is consistent for each of Plaintiffs Dream, Getify, and Sprinter.

3 303. There is sufficient demand from Plaintiffs and Class members to purchase or
 4 expend monetary credits for Google's Maps APIs and together with those from different
 5 competitors of places APIs or routes APIs (indeed, even to use the places APIs or routes APIs
 6 for free from competitors other than Google Maps), in order to use and link together Google's
 7 Maps APIs and places APIs and routes APIs from competitors on one app, on one webpage, on
 8 one website, or on one other type of digital display or screen for Plaintiffs and Class members'
 9 customers or potential customers to view.

10 304. The competitive alternative and best use for all stakeholders—Plaintiffs and Class
 11 members, indirect users, and competition more generally—is for Plaintiffs and Class members
 12 to have Google's Maps APIs and places APIs and routes APIs from different competitors used
 13 and linked together on one digital screen or display on one app, webpage, or website.

14 305. Indeed, there is sufficient demand for these separate products markets of Digital
 15 Maps APIs, Digital Places APIs, and Digital Routes APIs that Google Maps and competitors
 16 can and do offer them as separate products.

17 306. But Defendants' anticompetitive actions alleged herein renders it infeasible from
 18 an economic perspective—and indeed, forbidden from a contractual perspective—for Plaintiffs
 19 and Class members to purchase or expend monetary credits for Google Map's APIs and use and
 20 link a competitors' places APIs or routes APIs. Indeed, each of Plaintiffs Dream, Getify, and
 21 Sprinter have been forced to use only Google's Maps APIs, Places APIs, or Routes APIs.

22 307. For example, if one were to visit a Plaintiff or Class members' app or website and
 23 view on one page, display, or screen the Maps APIs that Plaintiff or the Class member purchased
 24 or expended monetary credits for from Google Maps, it would not make practical sense in terms
 25 of attention, effort, and time for that visitor to then be routed by the Plaintiff or the Class member
 26 to an entirely separate and unlinked app or website page, display, or screen for the visitor to
 27 view places APIs and routes APIs secured from a competitor of Google Maps. Instead, the
 28

1 visitor would likely lose interest, lose attention, lose track, simply abandon the process, and
 2 ultimately not continue patronage of Plaintiff or the Class member, eviscerating the purpose of
 3 the Plaintiff or Class member having purchased Google's Maps APIs in the first place.

4 308. The ability to link maps APIs, places APIs, or routes APIs together on one digital
 5 screen or display on one app, webpage, or website is critical to the user's experience and to the
 6 likelihood of the user's patronage of Plaintiffs and Class members. If the user is required to view
 7 the maps APIs, places APIs, or routes APIs on entirely separate and unlinked screens, displays,
 8 apps, webpages, or websites, that user would simply abandon the app or website or stop
 9 interacting with it altogether. Routing users to an entirely separate and unlinked app, website,
 10 or digital screen is not a reasonable substitute.

11 **3. Self-Preferencing**

12 309. Defendants have committed anticompetitive self-preferencing in connection with
 13 Google Maps.

14 310. Defendants use self-preferencing for map caching to benefit their own businesses
 15 and operations, to the detriment of competing digital-mapping providers that use any of
 16 Google's Maps APIs, Places APIs, or Routes APIs. And Defendants use self-preferencing for
 17 map caching to jack-up costs for Plaintiffs and Class members and degrade the quality of
 18 Plaintiffs and Class members' experience with Maps APIs, Places APIs, or Routes APIs.

19 311. According to the House Antitrust Report, "developers told the [House Antitrust
 20 Subcommittee] that Google uses its control over digital mapping to favor its own products in
 21 other lines of business."¹²⁵ Since "Google provides mapping services but also offers non-
 22 mapping products that use mapping as an input, Google can selectively degrade access for third
 23 parties that rely on its mapping product to disfavor them as competitors[.]"¹²⁶ Market
 24 participants told the House Antitrust Subcommittee that Google has added restrictions to Google

25
 26
 27 ¹²⁵ House Antitrust Report, at 242.
 28 ¹²⁶ *Id.* at 242-43.

1 Maps that apply to third-party developers but not to Google's own competing products.¹²⁷

2 312. "One example is unequal rights to map caching. Map caching occurs when a
 3 server stores copies of map images that it can speedily distribute when next recalled. Without
 4 caching, a map is drawn each time it is requested, a much slower process."¹²⁸ "Although
 5 previous versions of the Google Maps API agreement permitted caching by developers, the
 6 recent versions prohibit caching of maps with limited exception."¹²⁹

7 313. According to the House Antitrust Report, although third-party apps or websites
 8 developed with Google's Maps APIs, Places APIs, or Routes APIs can no longer store a map
 9 cache, "[m]arket participants note, however, that Google's own products built on Google
 10 Maps—ranging from its local search service to its hotel finder—face no similar restrictions,
 11 enabling them to load faster than those run by third parties."¹³⁰

12 314. "Commenting on the asymmetry, one market participant stated that Google's
 13 decision to deny third parties caching 'denigrates the service that our maps can provide
 14 compared to Google's.'"¹³¹ The market participant added "that's why we can't create an app
 15 that provides directions as well as Google or we can't update a user's location as quickly as
 16 Google."¹³²

17 315. Plaintiffs thus allege that the self-preferencing has been used by Google Maps as
 18 unreasonably exclusionary and a way to strangle competitors' access to data, which results in
 19 lower competition, and this results in anticompetitive harm to Plaintiffs and the Class as
 20 purchasers. Competitors who have faced the exclusionary conduct through the self-preferencing
 21 are alleged to be direct competitors of Google in the relevant antitrust products markets of
 22 Digital Maps APIs, Digital Places APIs, and Digital Routes APIs, who use as inputs to their

24
 25 ¹²⁷ *Id.* at 243.

26 ¹²⁸ *Id.*

27 ¹²⁹ *Id.*

¹³⁰ *Id.*

¹³¹ *Id.* at 243.

¹³² *Id.*

1 businesses Google's Maps APIs, Places APIs, and Routes APIs.

2 316. The anticompetitive harms of such exclusionary conduct have indeed been
 3 experienced by Plaintiffs and the Class.

4 317. Not being able to use caching—and thus needing to pay or expend monetary
 5 credits each and every time a Google Maps API, Places API, or Routes API is called—
 6 skyrockets costs for Plaintiffs and Class members and are often beyond their control. There is a
 7 charge each time a digital map is accessed, reloads, refreshes, and used.

8 318. For example (without limitation), Getify has been particularly harmed by this
 9 because of RestaurNote's relatively heavy reliance on digital mapping and the need to provide
 10 fresh location data to its users. Without caching, substantial money or monetary credits is
 11 expended each time a digital map is used, opened, or refreshed.

12 319. Being able to use caching also helps in the event that Google Maps crashes.
 13 Indeed, according to public revelations around March 2022, Google Maps nearly experienced a
 14 complete world-wide failure and outage that lasted several hours. This left Class members
 15 powerless to display their digital maps and help support their businesses, apps, and websites.

16 320. Getify notes that app or website developers prefer to hedge their data sources with
 17 caching. A standard practice of engineering maxims is that a developer would want to avoid a
 18 single-point of failure. This is where only a single provider gives data for a critical function of
 19 an app or website. For RestaurNote, which relies heavily on digital-mapping data and features,
 20 a failure, which happened recently with Google Maps, destroys the website's use. If Google
 21 Maps is down, the website is down. If Google Maps crashes or acts slowly, the website crashes
 22 or acts slowly. But in self-preferencing fashion, Google Maps does not let app or website
 23 developers cache Maps APIs, Places APIs, nor Routes APIs, meaning that app or website
 24 developers cannot store a non-active version of Maps APIs, Places APIs, nor Routes APIs. App
 25 or website developers thus cannot even display non-current digital-mapping data when Google
 26 Maps crashes.

27 321. In contrast, Mapbox supports offline functionality. Apps created with Mapbox
 28

1 mobile SDKs can download maps for selected geographical areas for use when the device does
 2 not have network connectivity. In addition, Mapbox mobile SDKs automatically cache tiles and
 3 other resources requested during normal use.

4 **4. Competitive Harm**

5 322. Defendants' negative tying, exclusive dealing, self-preferencing, and
 6 monopolization (or in the alternative, attempted monopolization) harms competition.

7 323. Defendants' conduct harms Plaintiffs and Class members and indirectly other
 8 users by depriving valid competitive choice, degrading privacy, degrading quality and variety
 9 of products offered, lowering quantity, stifling innovation, and raising the prices and reducing
 10 the quantity and value of monetary credits for Maps APIs, Places APIs, and Routes APIs.

11 324. As a direct and proximate result of Google's anticompetitive conduct, Plaintiffs
 12 and Class members suffered substantial losses and damages to their business and property.

13 325. As a direct and proximate result of the alleged anticompetitive conduct herein,
 14 Defendants reap more revenue, suppress Plaintiffs and Class members' earnings, and force them
 15 to reduce content, causing further reductions in earnings.

16 326. As a result of the anticompetitive conduct alleged herein, Defendants have
 17 foreclosed other firms from competing in the relevant antitrust products markets of Digital Maps
 18 APIs, Digital Places APIs, and Digital Routes APIs, to the detriment of Plaintiffs and Class
 19 members and indirectly to the detriment of other users.

20 327. Defendants' conduct goes far beyond aggressive competition. Their
 21 anticompetitive actions intend to and in fact have excluded rivals and harmed the competitive
 22 process. This conduct is not competition on the merits or otherwise privileged. Even worse, the
 23 conduct has been planned and thoroughly executed over many years—it is willful.

24 328. Defendants have reinforced Google Maps' market position by impairing potential
 25 competing maps APIs, routes APIs, or places APIs providers by using monopoly power (or
 26 alternatively and at the least, sufficient market and economic power) to prevent rivals and
 27 potential rivals from collecting datasets that could make rivals and potential rivals viable

1 alternatives to Google Maps for Plaintiffs and Class members, which in turn could loosen
 2 Google Maps' strangle-hold of the relevant antitrust products markets.

3 329. Defendants have foreclosed competition to Google's Maps APIs, Places APIs,
 4 and Routes API by having implemented the anticompetitive conduct alleged herein, such as
 5 negative tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative,
 6 attempted monopolization).

7 330. The foreclosure caused by Defendants' conduct in the Digital Maps API Market,
 8 Digital Places API Market, and Digital Routes API Market can be observed by the exit and
 9 limited entry of competitors. Entry into the relevant antitrust products markets has been weak,
 10 if not non-existent, over the time period of Google Maps' increasing dominance. This lack of
 11 entry has resulted from entry barriers arising from Defendants' anticompetitive conduct.

12 331. Defendants' abusive behavior also stifles innovation in the relevant antitrust
 13 products markets.¹³³ For example, competitors even offer better quality and more-fulsome
 14 places APIs and routes APIs, even for free.

15 332. Google Maps' negative tying, exclusive dealing, self-preferencing, and
 16 monopolization (or in the alternative, attempted monopolization) harms competition because
 17 there is little motivation for competitors in the Digital Maps API Market, Digital Places API
 18 Market, and Digital Routes API Market to enter these relevant antitrust products markets. And
 19 the competitors that are already in those markets are foreclosed from offering digital-mapping
 20 APIs to Plaintiffs and Class members, even competitors of places APIs and routes APIs that
 21 offer to do so at lower prices, at more valuable monetary credits to be expended (as compared
 22 to the number of API calls that the monetary credits satisfy), or even for free, and even
 23 competitors that offer more-fulsome and higher quality places APIs and routes APIs.

24 333. Defendants' anticompetitive conduct has shielded them from competitive

26 ¹³³ E.g., Stephen D. Houck, *Injury to Competition/Consumers in High Tech Cases*, St. Johns L.
 27 Rev. Vol. 5, Iss. 4, 593, 598 (2001) (“Any assessment of a restraint’s anticompetitive impact,
 28 however, will be incomplete if limited to price and output effects. The restraint’s impact on
 consumer choice and innovation must also be considered.”).

1 pressures that would otherwise require ongoing, substantial innovation in response to Plaintiffs
 2 and Class members' needs. This lack of innovation has caused grave harm to competition.

3 334. An example of the adverse effects from Defendants' anticompetitive conduct
 4 when innovation did occur—for example, by Waze before Defendants acquired it—
 5 demonstrates the potential innovation that has been thwarted throughout the Class Period.

6 335. Foreclosed competitors also lose motivation to innovate in the Digital Maps API
 7 Market, Digital Places API Market, and Digital Routes API Market because Defendants'
 8 anticompetitive actions alleged herein foreclose competitors from a massive portion of clients—
 9 Plaintiffs and Class members—that results in less revenue, earnings, and scale, in terms of
 10 access to users, their data, and the benefits that come from being able to use such data to interact
 11 with, refine, and otherwise enable competitors to improve their products and operations.

12 336. While Defendants have sought to avoid liability based on specific language—such
 13 that Google prevents only the “use” or “linking” of competing API content rather than its
 14 “display”¹³⁴—such specificity is in contrast with Defendants’ own Terms of Service, which
 15 throughout the Class Period used words to the effect of contain, display, link, and use
 16 interchangeably without precise definitions. But misuse of broad language cannot overcome
 17 practice, especially as the terms have evolved during the Class Period. Imprecise language
 18 interpretation cannot overcome practice, especially as Google Maps is free to change the
 19 terminology of its TOS in the future at its discretion (as it has in the past).

20 337. Even apparently powerful, large companies are beholden to Defendants.

21 338. For years before the Class Period, Google Maps offered extremely more-valuable
 22 monetary credits for Maps APIs, Places APIs, and Routes APIs, luring Plaintiffs and Class
 23 members to build their apps and websites with Google’s Maps APIs, Places APIs, and Routes
 24 APIs. In exchange for Google Maps offering such monetary credits, Google Maps received
 25 additional users and valuable data about such users, which Defendants have monetized, in part

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 28 ¹³⁴ See, e.g., Defs.’ MTD Comp., at 7.

1 through digital advertising and other means of selling the data.

2 339. However, around May 2018 and continuing thereafter, Google Maps introduced
 3 a single “pay-as-you-go” pricing plan for all of Maps APIs, Places APIs, and Routes APIs.¹³⁵

4 340. Prices soared across the board for Google’s Maps APIs, Places APIs, and Routes
 5 APIs. For example, Google Maps drove up the price for its Dynamic Maps API from \$0.50 to
 6 \$7.00 per 1,000 calls.¹³⁶

7 341. And the value of the monetary credits dramatically shrunk in terms of them being
 8 expended for APIs. For example, this shift reduced the number of monetary-credit-expended
 9 Dynamic Maps API calls from 25,000 per day to around 930 per day.¹³⁷

10 342. With the escalated prices across the board for Maps APIs, Places APIs, and Routes
 11 APIs, the value of the monetary credits plummeted because they would be expended for
 12 relatively far fewer APIs, in addition to the dramatic decrease in the monthly threshold.

13 343. Developers have reported to the House Antitrust Subcommittee that ever since
 14 Google Maps enforced these unexpected, drastic pricing changes, the pricing change amounted
 15 to increases of 1,400% in many instances.¹³⁸

16 344. One developer stated that Google instituted this price hike after “gaining
 17 dominance”; since becoming a Google Maps customer, the market participant’s costs “have
 18 increased over 20x[.]”¹³⁹

19 345. Another developer stated that the 2018 pricing change “took our bill from
 20 \$90/month in October to \$20,000/month in December.”¹⁴⁰

21 346. Several developers expressed their frustrations to the House Antitrust
 22 Subcommittee, noting that Google Maps’ decision to hike prices so sharply and without

24
 25 ¹³⁵ House Antitrust Report, at 239-40.

26 ¹³⁶ *Id.*

27 ¹³⁷ *Id.*

¹³⁸ *Id.*

¹³⁹ *Id.*

¹⁴⁰ *Id.*

1 significant notice underscored its power to set the terms of commerce.

2 347. Plaintiffs and Class members have surrendered more in their transacting—
 3 whether through purchases or expending monetary credits—or acquired less than they otherwise
 4 would have, absent the anticompetitive actions alleged herein.

5 348. The alleged unlawful negative tying, exclusive dealing, self-preferencing, and
 6 monopolization (or in the alternative, attempted monopolization) has resulted in damages to
 7 Plaintiffs and Class members, in part through the (i) egregious, supracompetitive price hikes in
 8 all of Google’s Maps APIs, Places APIs, and Routes APIs, and (ii) egregious, anticompetitive
 9 evisceration of monetary credits offered for Google’s Maps APIs, Places APIs, and Routes APIs,
 10 including, without limitation, the anticompetitive reduction of the value of monetary credits
 11 offered in comparison to the fewer calls that they can be expended on, due to the
 12 supracompetitive price hikes in all of Google’s Maps APIs, Places APIs, and Routes APIs.

13 349. These damages are continuing, and this anticompetitive misconduct harmed and
 14 continues to harm each of the Plaintiffs.

15 350. For example, as alleged elsewhere, throughout the Class Period, Plaintiff Dream
 16 spent approximately at least (i) \$6.53 on Google’s Maps APIs, including, without limitation, on
 17 the Maps API, Dynamic Maps API, and Dynamic Street View API, (ii) \$40.51 on Google’s
 18 Places APIs, including, without limitation, the Autocomplete – Per Request, Autocomplete
 19 without Places Details – Per Session, Geocoding API, Places API, Places Details API,
 20 Atmosphere Data API, and Contact Data API, and (iii) \$1,394.36 on Google’s Routes APIs,
 21 including, without limitation, the Distance Matrix API, Distance Matrix Advanced API, and
 22 Directions API. This equates to approximately \$1,441.40 spent in total.

23 351. In total, Dream spent at least \$984.76 out of pocket and \$456.64 in monetary
 24 credits during the Class Period, for a total of at least \$1,441.40 in payments to Google, consisting
 25 of at least \$6.53 spent on Maps APIs, \$40.51 spent on Places APIs, and \$1,394.36 spent on
 26 Routes APIs.

27 352. Plaintiff Getify spent at least \$17.73 out of pocket and \$15.22 in monetary credits

1 during the Class Period, for a total of at least \$17.73 in payments to Google, consisting of at
 2 least \$32.42 spent on Maps APIs and \$0.53 spent on Places APIs.

3 353. By further example, as alleged elsewhere, throughout the Class Period, Sprinter's
 4 Director recalls having expended and depleted monetary credits and having spent money on
 5 each of Google's Maps APIs, Places APIs, and Routes APIs. Several credit cards for Sprinter
 6 were associated with its Google Maps account through the GCP, and Sprinter's Director recalls
 7 having spent money on each of Google's Maps APIs, Places APIs, and Routes APIs, in addition
 8 to the monetary credits that were expended and depleted. Although the Director remembers
 9 having spent money on each of Google's Maps APIs, Places APIs, and Routes APIs, the GCP
 10 account was closed, and the credit cards used for Sprinter were cancelled.

11 354. Sprinter was able to find one record reflecting a charge of \$5.74 in early February
 12 2020 for a Maps API, for which it is unclear whether this was money charged to Sprinter in
 13 addition to the depletion of monetary credits. But Sprinter was unable to access and review past
 14 statements from Google's Maps APIs, Places APIs, and Routes APIs and the usage of monetary
 15 credits and additional monetary spending. The Director's memory of Sprinter having spent
 16 money on each of Maps APIs, Places APIs, and Routes APIs during the Class Period is based,
 17 in part, on the memory of the staggering prices and charges for each, which was the catalyst for
 18 Sprinter's Director to have researched competitors' offerings and identify preferred competitors,
 19 and Sprinter's Director's memory of the negative tying terms that forbade the product linking,
 20 despite the Director's ultimate identification of competitors that he preferred. Sprinter's records
 21 will be available in discovery.

22 355. Even if a Plaintiff or Class member purchased or expended monetary credits on
 23 only one of Google's Maps APIs, Places APIs, or Routes APIs, they would have been a victim
 24 of the anticompetitive schemes, such as the exclusive dealing and monopolization (or at the
 25 least, attempted monopolization), alleged herein and have been damaged because the schemes
 26 have resulted in the supracompetitive escalations in pricing for all of Google's Maps APIs,
 27 Places APIs, and Routes APIs and the lower value that the monetary credits have in proportion

1 to the amount of APIs calls that they could be expended on. But for the anticompetitive schemes
 2 alleged herein, all of Google's Maps APIs, Places APIs, and Routes APIs would have been
 3 offered at lower prices, and the monetary credits would have been offered in higher thresholds
 4 and been more valuable in terms of the amount of APIs calls that they could be expended for.

5 356. But for the anticompetitive practices alleged herein, there would have been more
 6 meaningful competition from existing competitors in the relevant antitrust products markets of
 7 the Digital Maps API Market, the Digital Places API Market, and the Digital Routes API
 8 Market, which would have reined in Defendants' supracompetitive prices, anticompetitive
 9 decimation of the quantity and value of monetary credits, byzantine terms, and lower quality.

10 357. Moreover, as alleged more fully elsewhere, Google Maps has offered digital-
 11 mapping that is incomplete, riddled with errors, and crashes, while excluding competition.
 12 Indeed, no meaningful competitors have entered the Digital Maps API Market, Digital Places
 13 API Market, and Digital Routes API Market since 2013.

14 358. The concentration of so much of the markets in Google Maps' digital-mapping
 15 products means that the relevant antitrust products markets and consumers are more vulnerable
 16 to a Google temporary shutdown or loss of data.

17 359. Plaintiffs and Class members would appreciate having back-up digital mapping
 18 data by another provider when Google's servers freeze or shut down, which has happened
 19 recently. Building back-up data into systems is critical in case the initial data provider
 20 experiences difficulties. Indeed, according to public revelations around March 2022, Google
 21 Maps nearly experienced a complete world-wide failure and outage that lasted several hours.
 22 This left Class members powerless to display their digital maps and help support their
 23 businesses, apps, and websites. Having back-up data also enables the user to truly experiment
 24 with which competitor provides the highest-quality data.

25 360. And Google Maps does not offer a full suite of APIs in all of its Places APIs and
 26 Routes APIs. There are bodies of API data within these relevant antitrust products markets that
 27 Google does not offer, but Plaintiffs and Class members cannot access from competitors because

1 of Google's anticompetitive conduct alleged herein.

2 361. The anticompetitive harm has damaged and continues to damage Plaintiffs and
 3 Class members, rendering the Class to be an effective mechanism to seek damages and
 4 equitable, declarative, and injunctive relief.

5 *CEO of Google Competitor Mapbox Details Anticompetitive Conduct and Harm*

6 362. Defendants have referred to Google Maps as a core search product for Google and
 7 a source for advertising.

8 363. Within a digital map, Places APIs provide search tools.

9 364. For example, Google's Place API, Place Details API, Place Search API, Find
 10 Place API, Autocomplete + Place Details – Per Session API, and Autocomplete – Per Request
 11 API all can retrieve data in response to searches done in a digital map.

12 365. On February 25, 2021, Mapbox's co-founder and CEO, Gunderson, submitted a
 13 letter to and testified before the U.S. House Judiciary Committee for a hearing entitled Reviving
 14 Competition, Part 1: Proposals to Address Gatekeeper Power and Lower Barriers to Entry.

15 366. Mapbox's customers are developers, and Mapbox offers digital-mapping APIs
 16 and SDKs for developers to add digital maps on their apps or websites.

17 367. Mr. Gunderson stated that analysts have estimated that if Google Maps was a
 18 standalone business, it would be valued at more than \$60 billion.

19 368. Mr. Gunderson stated that Google's gatekeeping through its Terms of Service is
 20 brazen.

21 369. He stated that his developer customers need help to stop Google Maps from
 22 bullying and intimidating them.

23 370. In essence, Google is using the Google Maps Terms of Service and is bullying
 24 and intimidating Mapbox's developer-customers who want to use digital-mapping APIs from
 25 Mapbox and digital-mapping features from Google to switch entirely to Google.

26 371. Mapbox's developer-customers have been forced to switch entirely to the Google
 27 ecosystem for their digital-mapping APIs.

1 372. Mr. Gunderson testified that Google was using its dominance to suppress
 2 competition in digital mapping. Google has been actively targeting developer-customers to
 3 enforce the Terms of Service.

4 373. Mr. Gunderson testified that everyone can understand that digital-maps and search
 5 are separate products.

6 374. Mr. Gunderson testified that according to the Google Maps Terms of Service,
 7 Google search APIs could only be used on Google Maps. In referring to the Terms of Service,
 8 Mr. Gunderson referred to language, among other portions, concerning the requirement that
 9 Places content only be displayed on a Google Map. This could reflect that Mr. Gunderson was
 10 referring, in part, to the search tools available in Places APIs.

11 375. Mr. Gunderson testified that there was no technical reason for this restriction.

12 376. He noted that the adverse effects on competition were only getting worse. More
 13 and more Mapbox developer-customers were being targeted by the exclusionary practices over
 14 the past few years, which has forced them to stop using Mapbox. This is not because Google
 15 Maps is a better product; instead, it is because of the Terms of Service.

16 377. Mr. Gunderson testified that this tying is not just anticompetitive for Mapbox, but
 17 it is also anticompetitive for developer-customers and consumers. According to Mr. Gunderson,
 18 the exclusionary, restrictive, and anticompetitive practices impact a huge number of developers
 19 and customers because it prevents developers from building the best product possible.
 20 Mr. Gunderson testified that he has observed developer-customers spend months dismantling
 21 what they had built because of Google's threats.

22 378. Mr. Gunderson testified that Google's gatekeeping only drives short-term dollars
 23 to Google and is blocking competition long-term by blocking product development and
 24 innovation. He testified that digital maps get better when more people use them. By blocking
 25 customers from using Mapbox, Google was depriving Mapbox of the data and scale that
 26 Mapbox needed to grow and make better products. This made it harder for Mapbox to build
 27 more-competitive digital maps and compete with Google.

1 379. Mr. Gunderson said that everyone was losing out because of this chilling effect.
 2 This included the users of the customer-developers' digital property. Mr. Gunderson testified
 3 that there were adverse impacts on consumer choice and quality. The anticompetitive practices
 4 radically limited consumer experience because developers were forced to use all things Google.
 5 As a result, with data collection being consolidated to Google, any positive innovation from
 6 assessing data would not be available to Google's competitors. Mr. Gunderson testified that this
 7 data flywheel has bad effects on consumers.

8 380. Mr. Gunderson testified that the purported explanations for the Google Maps
 9 Terms of Service being to avoid source confusion and quality issues lacked merit. He testified
 10 that developers can help dispel confusion and that digital-mapping APIs were being displayed
 11 in customized manners in different ways, so data confusion or quality issues were not
 12 meritorious motivations.

13 **H. Pro-Competitive Excuses Do Not Justify Google's Misconduct**

14 381. Under *per se* liability, whether the purported procompetitive effects outweigh the
 15 anticompetitive effects is irrelevant. The allegations herein present *per se* liability.

16 382. In the alternative, Defendants' potential defenses of procompetitive justifications
 17 cannot stand.

18 383. Defendants cannot justify their restraints of trade and monopolizing conduct. At
 19 the least, the purported procompetitive justifications are substantially overbroad to accomplish
 20 any intended goals of the exclusionary restrictions.

21 384. To the extent that Defendants merely rely on a bald assertion that they can impose
 22 whatever restrictions that they please on the purchase or monetary-credit expenditure of
 23 Google's Maps APIs, Places APIs, or Routes APIs, without any concern for antitrust and unfair
 24 competition laws, this would render these laws meaningless. If Defendants raise such an
 25 assertion as a purported procompetitive justification under a rule-of-reason analysis, should one
 26 apply, the assertion fails because the purported procompetitive justifications are pretextual,
 27 false, and are substantially outweighed by the anticompetitive effects.

1 385. The anticompetitive terms and enforcement do not concern how Plaintiffs and
 2 Class members use Google's Maps APIs already purchased as the tying product; instead, the
 3 anticompetitive terms and enforcement concern Plaintiffs and Class members being unable to
 4 purchase, use, nor link competitors' places APIs or routes APIs as the negatively tied products.

5 386. The anticompetitive negative tying restrictions in the Terms of Service do not
 6 concern the dictation of how Plaintiffs and Class members control, use, or design the Maps APIs
 7 that they had already purchased or expended monetary credits for from Google Maps. The
 8 control, use, or design of those Maps APIs that Plaintiffs and Class members purchased or
 9 expended monetary credits for from Google Maps is not what Defendants aim to dictate. Instead,
 10 the negative tying is aimed at forbidding Plaintiffs and Class members, who had already
 11 purchased or expended monetary credits for Maps APIs from Google Maps, from also
 12 purchasing, using, or linking places APIs or routes APIs from competitors in combination with
 13 the already-purchased Maps APIs from Google Maps.

14 387. It is not the control, use, or design of the Maps APIs already purchased or
 15 monetary-credit expended from Google Maps that is the true goal of the negative tying in the
 16 Terms of Service; instead, it is the goal of forcing Plaintiffs and Class members to purchase or
 17 expend monetary credits for Places APIs or Routes APIs that otherwise would have been
 18 purchased from competitors or the forcing of Plaintiffs and Class members to not purchase those
 19 places APIs or routes APIs at all, whether from competitors or not.

20 388. Even if Defendants argue otherwise, they cannot avoid antitrust laws merely by
 21 dictating policies.

22 389. Defendants cannot claim efficiency justifications for its conduct because their
 23 conduct creates numerous inefficiencies.

24 390. Defendants' pricing for Google's Maps APIs, Places APIs, and Routes APIs are
 25 widely known to be materially more expensive than competitors' pricing—indeed, competitors
 26 offer such APIs for free. A particular example of over-pricing by Google Maps compared to its
 27 competitors (without limitation) is Google's Places APIs, an otherwise commodity form of API

1 information.

2 391. And there would not be confusion to the end user about the source of the digital-
 3 mapping data for maps APIs, places APIs, or routes APIs because Plaintiffs and Class members
 4 can seamlessly display on a digital map the source of which component digital-mapping data of
 5 maps APIs, places APIs, or routes APIs comes from which competitor.

6 392. According to the House Antitrust Report, Developers, users, and mapping
 7 providers have questioned Google Maps' purported quality and confusion rationales, noting that
 8 developers are best positioned to determine whether using and linking APIs from multiple
 9 providers creates a "negative user experience."¹⁴¹

10 393. One provider added, debunking Defendant's rationale, that the "developers we
 11 partner with are extremely sophisticated. They're not confused."¹⁴²

12 394. Google Maps itself has protocols for Plaintiffs and Class members to attribute
 13 digital-mapping data to Google. Likewise, competitors have protocols for Plaintiffs and Class
 14 members to attribute digital-mapping data to them.

15 395. Mr. Gunderson testified that the purported explanations for the Google Maps
 16 Terms of Service being to avoid source confusion and quality issues lacked merit. He testified
 17 that developers can help dispel confusion and that digital-mapping APIs were being displayed
 18 in customized manners in different ways, so data confusion or quality issues were not
 19 meritorious motivations.

20 396. Moreover, users would appreciate having back-up digital mapping data by another
 21 provider when Google's servers freeze or shut down, which has happened recently. Building
 22 back-up data into systems is critical in case the initial data provider experiences difficulties.
 23 Indeed, according to public revelations around March 2022, Google Maps nearly experienced a
 24 complete world-wide failure and outage that lasted several hours. This left Class members
 25 powerless to display their digital maps and help support their businesses, apps, and websites.

26
 27 ¹⁴¹ House Antitrust Report, at 242.
 28 ¹⁴² *Id.* at 242, n. 1,474 (citing Interview with Source 572 (Sept. 24, 2020)).

1 Having back-up data also enables the user to truly experiment with which competitor provides
 2 the highest-quality data.

3 397. And Google does not offer a full suite of APIs in all of its Places APIs and Routes
 4 APIs. There are bodies of API data within these relevant antitrust products markets that Google
 5 does not offer, that competitors may have, but the Class members cannot access because of
 6 Google's anticompetitive conduct alleged herein.

7 **I. Google Maps Has Monopoly Power or, Alternatively and at the Least,**
 8 **Sufficient Market and Economic Power**

9 398. Under *per se* liability, Plaintiffs need not allege monopoly power. The allegations
 10 herein present *per se* liability.

11 399. In the alternative, if *per se* liability does not apply, Plaintiffs allege monopoly
 12 power or in the alternative and at the least, sufficient market or economic power.

13 400. Google Maps has monopoly power in the Digital Maps API Market to exceed the
 14 thresholds required for the claims for relief alleged herein under Sections 1 and 3 of the Sherman
 15 Act (15 U.S.C. §§1, 3) and Section 3 of the Clayton Act (15 U.S.C. §14), for the claim for relief
 16 for monopolization maintenance under Section 2 of the Sherman Act (15 U.S.C. § 2), and for
 17 the California state law claim (Cal. Bus. & Prof. Code §§ 17200, *et seq.*).

18 401. In the alternative and at the least, Google Maps has sufficient market and
 19 economic power in each of the relevant antitrust products markets of the Digital Maps API
 20 Market, Digital Places API Market, and Digital Routes API Market to exceed the thresholds
 21 required for the claims for relief alleged herein under Sections 1 and 3 of the Sherman Act (15
 22 U.S.C. §§1, 3) and Section 3 of the Clayton Act (15 U.S.C. §14), for the claim for relief for
 23 attempt to monopolize under Section 2 of the Sherman Act, 15 U.S.C. § 2, and for the California
 24 state law claim (Cal. Bus. & Prof. Code §§ 17200, *et seq.*).

25 402. Plaintiffs exceed such thresholds by alleging facts concerning direct evidence and
 26 concerning circumstantial evidence of Google Maps' monopoly power.

1 *Direct Evidence of Google's Monopoly Power*2 403. Direct evidence of monopoly power includes, without limitation,
3 supracompetitive prices, byzantine terms, reduced quality, and data-privacy violations, all
4 without the entrance of new nor meaningful competition from existing competitors.5 404. Direct evidence is control over prices, terms, and quality or exclusion of
6 competitors. For years, Defendants have been able to (i) impose supracompetitive prices, (ii)
7 impose byzantine terms effectuating negative tying, exclusive dealing, and self-preferencing
8 caching, (iii) offer digital-mapping that is incomplete, riddled with errors, and crashes, and (iv)
9 allegedly commit serious data-privacy violations in connection with location data, including,
10 without limitation, data collected through Google Maps. Google Maps has committed all of
11 these points (i)-(iv), all without meaningful competition from existing competitors nor any
12 meaningful competitors having entered the Digital Maps API Market, the Digital Places API
13 Market, and the Digital Routes API Market since 2013.14 405. But for the negative tying, exclusive dealing, self-preferencing, monopolization,
15 and barriers to entry, there would have been more-meaningful competition from existing
16 competitors, which combined have immaterial and dwindling market share compared to Google
17 Maps' above-90% market share in the Digital Maps API Market, and there would have been
18 entry of new competitors (no meaningful ones have entered the market since 2013), both of
19 which is further evidenced by Google's ability to have enacted supracompetitive prices, onerous
20 contract terms, lower quality, and data-privacy violations for several years without losing
21 dominance. Existing competitors have been barricaded away from enticing Google Maps'
22 customers over several years because of the negative tying, exclusive dealing, self-preferencing,
23 and anticompetitive actions. Competitors' efforts to increase supply, variety, or quality or to
24 decrease prices (even offer products for free) have been to no avail to entice Google's customers
25 away from Google Maps because the customers were shackled into the Google Maps ecosystem
26 through the negative tying, exclusive dealing, and self-preferencing. Any of competitors'
27 supply, variety, quality, innovation, or pricing decisions have not been a competitive force
28

1 against nor even temper Google Maps' dominant market position. This further demonstrates
 2 Google Maps' monopoly power. With this monopoly power, Google Maps has not provided
 3 competitive pricing, output, supply, quality, variety, nor innovation over several years to retain
 4 its customers, because it has relied on its exclusionary power instead.

5 406. As alleged, Google Maps has maintained and expanded its user base and financial
 6 dominance over several years, despite these direct demonstrations of monopoly power, all
 7 without neither existing competitors making a dent in Google Maps' market share nor new entry
 8 of meaningful competitors.

9 407. These factors demonstrate direct evidence of monopoly power.

10 408. But for the anticompetitive practices alleged herein, which are negative tying,
 11 exclusive dealing, self-preferencing, and monopolization, there would have been meaningful
 12 competition from existing competitors in the Digital Maps API Market, Digital Places API
 13 Market, and Digital Routes API Market, which would have reined in Defendants'
 14 supracompetitive prices, byzantine terms, lower quality, and data-privacy violations.

15 409. For context, Defendants do not publicly disclose specific financial metrics for
 16 Google Maps. But Defendants and analysts have reported throughout the Class Period that
 17 Google Maps has more than a billion users per month, a statistic that is alleged to have remained
 18 durable during the Class Period. Experienced analysts have estimated that Google Maps' annual
 19 revenues as of late-2019 have ranged between \$2.95 billion to \$4.3 billion, projections for 2020
 20 annual revenue to have been \$4.8 billion, projections during the Class Period for annual revenue
 21 to reach approximately \$9 billion, and projections for 2023 annual revenue of approximately
 22 \$11 billion. As a standalone business, Google Maps has been estimated by analysts and a bank
 23 to have ranged between approximately \$50 billion and \$61.5 billion during the Class Period.
 24 Further, despite having flexed direct monopoly power for several years, Google Maps' growth
 25 and financial performance under these metrics have only increased, demonstrating the inability
 26 of competitors to temper Google's anticompetitive actions.

27 *Google Maps Has Imposed Supracompetitive Prices While Excluding Competition.*

1 410. Google Maps has imposed supracompetitive prices, while excluding existing
 2 competition. And no meaningful competitors have entered the Digital Maps API Market, Digital
 3 Places API Market, and Digital Routes API Market since 2013.

4 411. Google Maps' direct demonstration of monopoly power has been its ability to
 5 sustain egregious, supracompetitive prices, all while foreclosing Plaintiffs from using preferable
 6 competitors that have been known to offer materially cheaper, if not free, places APIs and routes
 7 APIs that are of comparable quality, if not better.

8 412. Prior to 2018, Google Maps offered meaningful amounts of monetary credits to
 9 lure Class members into building their apps, websites, or other digital property with Google's
 10 Maps APIs, Places APIs, and Routes APIs.

11 413. However, around May 2018 and continuing thereafter, Google Maps introduced
 12 a single "pay-as-you-go" pricing plan for Maps APIs, Places APIs, and Routes APIs.

13 414. Prices soared across Google Maps' Maps APIs, Places APIs, and Routes APIs.
 14 For example, Google Maps drove up the price for its Dynamic Maps API from \$0.50 to \$7.00
 15 per 1,000 calls.

16 415. And the value of the monetary credits dramatically shrunk in terms of them being
 17 exchanged for APIs. For example, this shift reduced the number of monetary-credit-expended
 18 Dynamic Maps API calls from 25,000 per day to around 930 per day.

19 416. With the escalated prices across the board for Maps APIs, Places APIs, and Routes
 20 APIs, the value of the monetary credits plummeted because they would be expended for
 21 relatively far fewer APIs, in addition to the dramatic decrease in the monthly threshold.

22 417. Developers have reported to the House Antitrust Subcommittee that ever since
 23 Google Maps enforced these unexpected, drastic pricing changes, the pricing changes amounted
 24 to increases of 1,400% in many instances.¹⁴³

25 418. One developer stated that Google instituted this price hike after "*gaining*

27
 28 ¹⁴³ House Antitrust Report, at 239-40.

1 ***dominance***"; since becoming a Google Maps customer, the market participant's costs "have
 2 increased over 20x[.]"¹⁴⁴

3 419. Another developer stated that the 2018 pricing change "took our bill from
 4 \$90/month in October to \$20,000/month in December."¹⁴⁵

5 420. Several developers expressed their frustrations to the House Antitrust
 6 Subcommittee, noting that Google Maps' decision to hike prices so sharply and without
 7 significant notice underscored its power to set the terms of commerce.

8 421. Defendants' pricing for its Places APIs and Routes APIs are widely known to be
 9 materially more expensive than competitors' pricing—indeed, competitors offer such APIs for
 10 free. A particularly egregious example of over-pricing by Google Maps compared to its
 11 competitors (without limitation) is Google's Places APIs, an otherwise commodity form of API.

12 422. Google's anticompetitive actions have walled off competitors from the above-
 13 90% market share that Google Maps possess over the Digital Maps API Market of customers,
 14 and through the negative tying, exclusive dealing, and monopolization, this is extended to wall
 15 off customers in the Digital Places API Market and Digital Routes API Market. Competitors
 16 cannot access those customers, regardless of any increases in output, supply, product quality,
 17 variety, or innovation or decreases in prices that competitors would attempt to deploy. The
 18 competitors' pricing, output, supply, quality, variety, and innovation thus does not pose as a
 19 competitive force to temper Google Maps' pricing, output, supply, quality, variety, nor
 20 innovation. This further demonstrates Google Maps' monopoly power. With this monopoly
 21 power, Google Maps has not provided competitive pricing, output, supply, quality, variety, nor
 22 innovation over several years to retain its customers, because it has relied on its exclusionary
 23 power instead.

24 423. But for the anticompetitive practices alleged herein, which are negative tying,
 25 exclusive dealing, self-preferencing, and monopolization, there would have been more

27 ¹⁴⁴ Antitrust House Report, at 240.

28 ¹⁴⁵ *Id.*

1 meaningful competition from existing competitors in the Digital Maps API Market, Digital
 2 Places API Market, and Digital Routes API Market, which would have reined in Defendants'
 3 supracompetitive prices. Google's supracompetitive pricing resulted in meaningful part from
 4 the anticompetitive conduct and from reduced quantity and variety of supply from existing
 5 competitors, due to the shackling of Google Maps' customers to transact only in the Google
 6 Maps ecosystem.

7 *Google Maps Has Imposed Anticompetitive Terms While Excluding Competition.*

8 424. Google Maps has imposed byzantine, anticompetitive terms effectuating negative
 9 tying, exclusive dealing, and self-preferencing caching, while excluding existing competition.
 10 And no meaningful competitors have entered the Digital Maps API Market, Digital Places API
 11 Market, and Digital Routes API Market since 2013.

12 425. As alleged herein, Google Maps has imposed and enforced anticompetitive and
 13 exclusionary contractual terms, including, without limitation, terms that effectuate negative
 14 tying, exclusive dealing, and self-preferencing in connection with caching.

15 426. Allegations concerning developers' reactions to these byzantine, anticompetitive,
 16 and exclusionary terms and to having been intimidated and bullied by Defendants supports the
 17 direct demonstration of Google Maps' monopoly power.

18 427. A sampling of quotes from the House Antitrust Report further reflect Google
 19 Maps' direct demonstrations of monopoly power to impose exclusionary terms:

20 ***Several developers stated that Google Maps introduced greater licensing***
 21 ***restrictions as it gained a stronger market position.***¹⁴⁶ One noted that Google's
 22 control over what now serves as a key mapping technology has allowed Google to
 23 call all the shots. "*We license Google Maps and it's essentially a contract of*
adhesion. It's full of restrictions and we aren't able to negotiate any changes,"
 the developer said. ... "*With Google, we just have to comply with all their*
restrictions."¹⁴⁷

24 * * *

25 Google, however, ***prohibits*** developers from using any part of its mapping tools

26

27 ¹⁴⁶ House Antitrust Report, at 234.

28 ¹⁴⁷ *Id.*

1 alongside any non-Google mapping features.¹⁴⁸

2 * * *

3 According to the House Antitrust Report, (at 241), “Both versions of this provision
 4 **prohibit** developers from using *any* component of the Google Maps Core Service
 5 with mapping services provided by non-Google firms. The April 2020 change to
 6 the terms of service is **even more restrictive**: it prohibits developers from even
 7 displaying any component of Google Maps ‘near’ any other map. *In practice,*
Google’s contractual provision has led several major companies to switch entirely
to Google’s ecosystem, even in cases where they preferred mapping services from
a non-Google provider, such as Mapbox.”¹⁴⁹

8 * * *

9 Through interviews with market participants, the Subcommittee learned that
 10 Google now enforces this provision **aggressively**. According to one firm, Google
 11 closely tracks and pressures developers who use Google’s place data in conjunction
 12 with mapping data from a non-Google firm, effectively forcing them to choose
 whether they will use all of Google’s mapping services or none of them.¹⁵⁰

13 * * *

14 One firm described Google’s coercive tactics, stating, “*It’s a bigger player putting*
 15 *a gun to our head saying ‘switch or else.’*”¹⁵¹

16 * * *

17 Because Google’s monopoly in online search has furnished it with a trove of data,
 18 as well as a robust index, its place search feature is also seen by many market
 19 participants effectively as a must-have. One market participant that has lost
 20 business partnerships due to Google’s coercive restrictions stated that Google is
 21 using access to its dominant search products as leverage to intimidate businesses
 22 out of working with other map providers.¹⁵² ... He noted that Google’s conduct
 now threatens his firm’s survival, saying, “*This is existential for us.*”¹⁵³

23 * * *

24 Google has also used its **dominance** in mapping to acquire cloud computing
 25 customers for its Google Cloud Platform (GCP). Specifically, in 2018, Google

26 ¹⁴⁸ *Id.* at 240-41.

27 ¹⁴⁹ *Id.* at 241.

28 ¹⁵⁰ *Id.* at 241, n. 1,467 (citing Interview with Source 572 (Sept. 24, 2020)).

¹⁵¹ *Id.* at 241, n. 1,468 (citing Interview with Source 157 (Sept. 25, 2020)).

¹⁵² *Id.* at 241-42, n. 1,469 (citing Interview with Source 572 (Sept. 24, 2020)).

¹⁵³ *Id.* at 242, n. 1,470 (citing Interview with Source 572 (Sept. 24, 2020)).

1 implemented a change requiring all API calls to use a valid API key, which must
 2 be linked to a Google Cloud Platform account. All keyless calls to the Maps
 3 JavaScript API and Street View API trigger low-resolution maps that are
 4 watermarked with “for development purposes only. ... Developers who do not have
 5 a Google Cloud account, and therefore do not have an API key, are effectively
 6 locked out of Google Maps. Even if an application is built on a non-Google cloud
 7 platform, developers are forced to use GCP for the Maps API portion of their app.
 8 ... By one estimate, revenue from Google Cloud Platform has more than tripled
 9 since 2017, the year before Google began tying access to Google Maps to Google
 10 Cloud Platform.¹⁵⁴

11 428. But for the anticompetitive practices alleged herein, which are negative tying,
 12 exclusive dealing, self-preferencing, and monopolization, there would have been more
 13 meaningful competition from existing competitors and entry of new ones in the Digital Maps
 14 API Market, Digital Places API Market, and Digital Routes API Market, which would have
 15 reined in Defendants’ exclusionary terms.

16 *Google Maps Has Offered Digital-Mapping That Is Incomplete, Riddled with Errors, and*
 17 *Crashes, While Excluding Competition.*

18 429. Google Maps has offered digital mapping that is incomplete, riddled with errors,
 19 and crashes, while excluding competition from existing competitors. And no meaningful
 20 competitors have entered the Digital Maps API Market, Digital Places API Market, and Digital
 21 Routes API Market since 2013.

22 430. Even with an ever-increasing stranglehold over its Maps APIs, Places APIs, and
 23 Routes APIs, Google Maps with its strict control has done an abysmal—if not intentional or
 24 reckless—job of maintaining quality and accurate business-mapping features. Examples of
 25 findings regarding Google’s egregious errors are noted in the House Antitrust Report.

26 431. The House Antitrust Report even documented how Google’s monopoly and lack
 27 of competition allowed it to skimp on quality control for listings, resulting in harm to consumers
 28 and profit to Google from such paid listings. The report even documented the story of a “67-
 29 year-old-woman” who had “contacted a local home repair service she found through Google,”

154 *Id.* at 242, n. 1,474-476.

only for a fake repairman to arrive who overcharged the woman and made her fear for her life.¹⁵⁵

432. The Antitrust House Subcommittee cited more details from a *Wall Street Journal* article dated June 20, 2019, by Rob Copeland and Katherine Bindley, entitled “Millions of Business Listings on Google Maps Are Fake—and Google Profits[,]” reporting the following:

Yet Google Maps, triggered by such Google queries as the one Ms. Carter made, is overrun with millions of false business addresses and fake names, according to advertisers, search experts and current and former Google employees.

* * *

Three years later, Google still can't seem to stop the proliferation of fictional business listings and aggressive con artists on its search engine. The scams are profitable for nearly everyone involved, Google included. Consumers and legitimate businesses end up the losers.

* * *

Google handles more than 90% of the world's online search queries, fueling \$116 billion in advertising revenue last year. In recent years, it has extended that dominance to local search queries, emerging as the go-to source on everything from late-night food deliveries to best neighborhood plumbers.

* * *

... Google Maps in recent months has packed more ads onto its search queries. It is central to Google parent [Alphabet's] hope to recharge a cresting digital-advertising operation.

* * *

Google's failure to eliminate phony listings puts legitimate businesses at the risk of threats and blackmail by competitors or con artists.

* * *

Prices in business categories that Google has identified as ripe for ad fraud—specialized attorneys, for instance—have risen more than 50% in the past two years. Some law firms pay more than \$1,000 for every customer who clicks on their website from a Google search.”

¹⁵⁵ See House Antitrust Report, at 243-45 & n. 1,486.

1 433. Additional quotes from the House Antitrust Report follow:

2 Although Google's responses to the Subcommittees' questions about its conduct
 3 regarding Google Maps emphasized "quality" and "user experience," ... public
 4 reporting has documented that Google Maps' listings are "overrun with millions of
 5 false business addresses and fake names." ... A survey of experts conducted by the
 6 *Wall Street Journal* estimated that Google Maps hosts around 11 million falsely
 7 listed businesses on any given day. ... The same experts stated that "a majority" of
 8 the listings on Google Maps for businesses such as "contractors, electricians,
 9 towing and car repair services, movers and lawyers," as well as others, are not
 10 actually located at the location given by Google Maps.

11 These fake listings endanger consumer safety, giving rise to situations where users
 12 of Google Maps have unknowingly requested home repairs and other services from
 13 fraudulent providers, ultimately, paying inflated prices for shoddy work. ... The
 14 fraudulent listings also disadvantage legitimate businesses, both those whose
 15 listings have been hijacked as well as those whose own listings appear below those
 16 of sham businesses.

17 Legitimate businesses hurt by fake listings say that contacting Google to report the
 18 situation generally fails to resolve the problem. In practice, the only ways legitimate
 19 businesses can shield themselves from fake listings is to buy ads from Google. Ad
 20 prices for categories that are most susceptible to ad fraud have increased more than
 21 50% over the last two years.

22 ***

23 Both digital advertisement experts and individuals engaging in fraudulent activity
 24 believe that Google has turned a blind eye to the problem. According to the *Wall*
 25 *Street Journal*, one ad specialist who was invited by Google to help root out the
 26 problem left after concluding that Google "has obviously chosen not to solve the
 27 problem." ... A business owner who helps facilitate the fake listings says his
 28 activity leaves a "huge footprint" and yet Google is "just letting it happen." He
 29 added, "I know Google knows."

30 434. Users would appreciate having back-up digital mapping data by another provider
 31 when Google's servers freeze or shut down, which has happened recently. Building back-up
 32 data into systems is critical in case the initial data provider experiences difficulties. Indeed,
 33 according to public revelations around March 2022, Google Maps nearly experienced a
 34 complete world-wide failure and outage that lasted several hours. This left Class members
 35 powerless to display their digital maps and help support their businesses, apps, and websites.
 36 Having back-up data also enables the user to truly experiment which competitor provides the
 37

1 highest-quality data.

2 435. Google Maps does not even offer a full suite of APIs in all of its Places APIs and
 3 Routes APIs. There are bodies of API data within the Places APIs and Routes APIs that Google
 4 does not offer, that competitors may have, but the Class members cannot access because of
 5 Google's anticompetitive conduct alleged herein.

6 *Google Maps Has Allegedly Committed Data-Privacy Violations, While Excluding
 7 Competition.*

8 436. Defendants have allegedly committed serious data-privacy violations in
 9 connection with location data, including, without limitation, data collected through Google
 10 Maps, while excluding competition from existing competitors. And no meaningful competitors
 11 have entered the Digital Maps API Market, Digital Places API Market, and Digital Routes API
 12 Market since 2013.

13 437. Google has reduced privacy without any corresponding benefit to customers—
 14 only benefits to itself—and still has not meaningfully lost customers to competitors in doing so.

15 438. For the avoidance of doubt, Plaintiffs in this class action are not alleging
 16 violations of their data-privacy rights nor seeking to represent Class members in connection
 17 with alleged violations of their data-privacy rights. Instead, these facts demonstrate direct
 18 evidence of Google's monopoly power throughout the Class Period.

19 439. According to the House Antitrust Report, each of Google's offerings "***provides
 20 Google with a trove of user data, reinforcing its dominance across markets and driving
 21 greater monetization through online ads. Through linking these services together, Google
 22 increasingly functions as an ecosystem of interlocking monopolies.***"¹⁵⁶

23 440. On November 8, 2010, a consolidated class action complaint was filed in the *In
 24 re Google, Inc. Street View Electronic Communications Litigation*, No. 3:10-md-02184-CRB
 25 (N.D. Cal.). Google Street View is a technology featured in Google Maps and Google Earth
 26 Products that offers panoramic views from various positions along many streets across the globe.

27 28 ¹⁵⁶ House Antitrust Report, at 15.

1 It was allegedly implemented, in part, through having vehicles canvass the globe to intercept
 2 location data. Plaintiffs in that class action alleged, in part, that Google violated state laws by
 3 collecting user's sensitive and valuable location data without users' consent and in misleading
 4 manners. Google had even allegedly admitted to collecting and storing data and that Google had
 5 "screwed up." Plaintiffs in that class action alleged that regulators around the globe, including
 6 in the U.S., were investigating related issues. The allegations included statements by Google's
 7 then-CEO, Eric Schmidt, in connection with Google Street View to the effect of the following:
 8 users concerned that photographs of their homes can be easily accessed around the world
 9 through the Internet should "just move"; "Google's policy was to 'get right up to the creepy
 10 line'"; and that "[i]f you have something that you don't want anyone to know, maybe you
 11 shouldn't be doing it in the first place." (See, e.g., ¶¶ 1-12, 47-50, 75-82.)

12 441. In 2019 and 2020, it was reported that an approximate \$13 million settlement was
 13 reached in this class action.

14 442. Google Maps helped amass its empire and increased barriers to entry, in part from
 15 having used Google Street View. This is a method that competitors allegedly cannot use, as
 16 Google Maps did, because it would allegedly violate data-privacy laws.

17 443. According to an AP article dated August 13, 2018, by Ryan Nakashima, entitled
 18 "AP Exclusive: Google tracks your movements, like it or not," Google allegedly has been
 19 recording and storing user location data, including, without limitation, through Google Maps,
 20 without consent—indeed, even in alleged contravention of when users select privacy settings to
 21 avoid such collection—and in misleading manners. Computer-science researchers at Princeton
 22 University supported the allegations. The alleged unauthorized and misleadingly collected
 23 location data was used by Google for advertising purposes, among other uses.¹⁵⁷

24 444. In a partially redacted complaint filed on May 27, 2020, by Mark Brnovich,

25
 26
 27 ¹⁵⁷ Ryan Nakashima, *AP Exclusive: Google tracks your movements, like it or not*, AP (Aug. 13,
 28 2018), <https://apnews.com/article/north-america-science-technology-business-ap-top-news-828aefab64d4411bac257a07c1af0ecb>.

1 Arizona's Attorney General as of that date, in the *Arizona v. Google LLC* litigation before the
 2 Honorable Judge Timothy Thomason of the Superior Court of the State of Arizona, Maricopa
 3 County (Civil Number 2020-006219), the Arizona Attorney General alleged that in
 4 consideration for the use of Google's software products, including, without limitation, Google
 5 Maps, Google collects data from users, including, without limitation, location data, in order for
 6 Google to develop and maintain its products and services and deliver advertising, even where
 7 Google may offer those products and services for free to users. Generally, the allegations were
 8 that data collection occurred without user consent, in misleading manners, and in violation of
 9 state laws. An example provided was that if a user searched for restaurants near the user in
 10 Google Maps, Google collects the search term and information about that activity, such as the
 11 user's location and IP address. The Arizona Attorney General alleged that testimony from
 12 Google's former Vice President of Product for Google Maps and then Vice President of Product
 13 for Google Ads, Jack Menzel, supported the allegations that Google is able to offer tools to
 14 users, including, without limitation, Google Maps, in exchange for collection of data, such as
 15 location data, that Google uses for its products and services and for advertising (even if those
 16 products or services are offered for free). (¶¶ 25-26, 38, 56, 60, 80, 93, 141-43, 147, 150.)

17 445. Part of the Arizona Attorney General's allegations were that even if a user selected
 18 off for the feature through which Google collected location data, Google nevertheless collected
 19 the user's location data. Google allegedly perpetuated this unauthorized location data collection
 20 through several of users' devices. Part of the location data that Google allegedly collected in
 21 unauthorized manners without consent was sensitive home and office location data. (¶¶ 25-26,
 22 38, 56, 60, 80, 93, 141-43, 147, 150.)

23 446. Media reported that in October 2022, the Arizona Attorney General settled the
 24 lawsuit against Google for approximately \$85 million.

25 447. On August 31, 2022, the Honorable Judge Robert R. Rigsby of the Superior Court
 26 of the District Court of Columbia, Civil Division, in *District of Columbia v. Google LLC*, Case
 27 No. 2022 CA 000330 B, in denying Google's motion to dismiss, held that Google must face
 28

1 claims lodged by Karl Racine, the District of Columbia's Attorney General as of that date, that
 2 Google surreptitiously tracks users' locations (in part, through Google Maps), in order to send
 3 users targeted advertisements. The allegations were based, in part, on Google surreptitiously
 4 tracking and storing location data, including a setting called "web & app activity" that collects
 5 data when users interact with products, including, without limitation, Google Maps.

6 448. On November 14, 2022, media reported that the attorneys general of Oregon, New
 7 York, Florida, Illinois, and three dozen other states reached a historic \$391.5 million settlement
 8 with Google to resolve allegations that it surreptitiously tracks users' locations even after they
 9 believe that they have turned off that feature. As of that time, this was the largest multistate
 10 attorney-general consumer-privacy settlement in U.S. history. The attorneys general alleged that
 11 the probe revealed that Google violated state consumer protection laws by misleading users
 12 about the scope and operation of its location tracking practices for several years.

13 449. In commenting on this historic settlement, William Tong, Connecticut's Attorney
 14 General as of that date, and other State Attorneys General stated that location data is among the
 15 most sensitive and valuable data that Google collects, that there are several reasons why users
 16 would opt out of tracking, and that part of the allegations were that Google continued to collect
 17 such location data, despite users having selected that Google not do so. The State Attorneys
 18 General alleged that location data, including, without limitation, location data collected from
 19 Google Maps, was a key part of Google's digital advertising business, which could be used and
 20 monetized by Google to build detailed user profiles and target ads on behalf of Google's
 21 advertising clients. Even a limited amount of location data was alleged to expose users'
 22 identities and routines and could be used to infer users' personal details.

23 450. Again, Plaintiffs in this class action are not alleging violations of their data-
 24 privacy rights nor seeking to represent Class members in connection with alleged violations of
 25 their data-privacy rights. Instead, these facts demonstrate direct evidence of Google Maps'
 26 monopoly power throughout the Class Period.

27 *Circumstantial Evidence of Google's Market Power*

1 451. Circumstantial evidence of monopoly power includes a defendant owning a
 2 dominant share of the market and that the market has significant barriers to entry.

3 452. Google Maps has over 90% market share in the Digital Maps API Market.
 4 Durable and staggering barriers to entry exist, in part through Defendants' own actions.

5 453. Plaintiffs and the Class cannot feasibly avoid Google's Maps APIs in totality
 6 because of Google Maps' alleged monopoly share of above 90%, the barriers to entry (that
 7 Google, in part, helped erect) that keep existing competitors and potential new ones at bay, and
 8 the sheer data advantage that Google has, especially in connection with its Maps APIs,
 9 considering, for example, the cross-app data sharing within the panoply of Google's other apps
 10 and tools, and with Google Maps being a default app on Android mobile phones, which gives
 11 Google Maps an advantage over competitors.

12 454. A barrier to entry for competition is direct network effects. The value of each of
 13 Google's Maps APIs, Places APIs, and Routes APIs increases as more Plaintiffs and Class
 14 members use them.

15 455. A barrier to entry for competition is high switching costs. Switching costs are high
 16 for Plaintiffs and Class members to disassemble a digital map on their apps or websites—
 17 including, without limitation, the opportunity cost of having their apps or websites under
 18 construction during that period—to remove all of Google's Maps APIs, Places APIs, or Routes
 19 APIs, in order to create another digital map composed entirely of competitors' maps APIs,
 20 places APIs, or routes APIs. Plaintiffs and Class members have become locked in from
 21 abandoning all of Google's Maps APIs, Places APIs, or Routes API in their entirety from a
 22 digital map and starting from scratch to develop a digital map including maps APIs, places APIs,
 23 or routes APIs entirely from competitors.

24 456. One blunt weapon that Google wields to erect entry barriers is a treasure-trove of
 25 competitively valuable information, including, without limitation, traffic, conditions and
 26 rerouting information, interior and exterior photographs, reviews, and commentary from
 27 Google+ friends.

1 457. For instance, a person's location history using Google Maps reveals valuable and
 2 sensitive information about others as well—such as traffic patterns and other data.

3 458. Defendants have an enormous advantage over competitors owing to the sheer
 4 volume of tracking of and processing location data that it acquires about users through its
 5 panoply of products and tools. It acquires data daily from browsing histories and advertising
 6 data from the suite of its Google search, Chrome, G-Suite, and YouTube offerings, and it has
 7 location data from Google Maps, Waze, and Google's Android operating system embedded in
 8 hundreds of millions of mobile phones. Defendants yield this blunt weapon to erect entry
 9 barriers through a treasure-trove of competitively valuable information. Indeed, Google's
 10 former CEO Mr. Schmidt has boasted that “[w]e know where you are. We know where you've
 11 been. We can more or less know what you've been thinking about.”

12 459. Defendants have allegedly violated laws to have gathered and monetized such
 13 location data, including, without limitation, through Google Maps. Competitors are alleged to
 14 be unable to lawfully use similar methods to build digital-mapping databases.

15 460. Google Maps benefited from a lack of prohibitions on collecting location data, an
 16 advantage that competitors today lack, given the alleged passage of new data restrictions that
 17 limit the development of digital-mapping technology. Many of these rules came into existence
 18 following public outrage prompted by Google Street View. By the time that these rules were
 19 implemented, Defendants had already mapped out most of the planet.

20 461. Google Maps has maintained monopoly power—or alternatively and at the least,
 21 sufficient market and economic power—in the relevant products markets.

22 **J. Each of Plaintiffs Experienced Anticompetitive Actions and Suffered**
 23 **Antitrust Harm**

24 462. Each of Plaintiffs Dream, Getify, and Sprinter experienced anticompetitive harm.
 25 They suffered damages in terms of supracompetitive prices paid for Google's Maps APIs, Places
 26 APIs, and Routes APIs, the anticompetitive reduction of the threshold for and value of monetary
 27 credits expended from Google's Maps APIs, Places APIs, and Routes APIs, and other
 28

1 anticompetitive harm.

2 463. Google is using the negative tying with Maps APIs being the tying product, with
 3 the intent and effect of restraining existing competition in and acquiring or enhancing its
 4 power—or at the least, to maintain or slow down any diminution of its power resulting from
 5 true competition, absent the alleged anticompetitive restraints—in the negatively tied products,
 6 its Places APIs and Routes APIs.

7 464. The negative tying forecloses Plaintiffs and the Class from exercising competitive
 8 choices in selecting the negatively tied products of places APIs or routes APIs from competitors
 9 that they prefer; the negative tying narrows Plaintiffs and Class members' freedom as buyers of
 10 choice and facilitates Google's exploitation of them in connection with the negatively tied
 11 products of Places APIs and Routes APIs, through overcharging and other anticompetitive harm.
 12 The negative tying forecloses competition on the merits in the Digital Places API Market and
 13 Digital Routes API Market.

14 465. Moreover, in totality, the negative tying, exclusive dealing, self-preferencing, and
 15 monopolization (or at the least and in the alternative, attempted monopolization) results in
 16 anticompetitive effects and harm in each of the markets for Digital Maps APIs, Digital Places
 17 APIs, and Digital Routes APIs, including, without limitation, anticompetitive price increases
 18 and reductions in monetary credits, quantity, supply, variety, quality, and innovation in each of
 19 the markets, but for the anticompetitive conduct. This results in even if Plaintiffs and Class
 20 members purchased or expended monetary credits on any one of Google's Maps APIs, Places
 21 APIs, and Routes APIs, they have suffered anticompetitive harm and damages.

22 466. The anticompetitive actions in totality serve to lock-in Plaintiffs and Class
 23 members into the Google Maps ecosphere. They serve to exclude competitors in any of the
 24 Digital Maps API Market, Digital Places API Market, and Digital Routes API Market. By using
 25 the anticompetitive schemes to disable Plaintiffs and Class members from purchasing places
 26 APIs and routes APIs from competitors, Google forces those Plaintiffs and Class members to
 27 purchase Places APIs and Routes APIs from Google Maps and further entrench those Plaintiffs

1 and Class members into the Google Maps ecosystem, making them more reliant on Google's
 2 Maps APIs as well. This helps further exclude competition on the merits in each of the Digital
 3 Maps API Market, Digital Places API Market, and Digital Routes API Market, foreclosing
 4 competitors from customers and scale to advance technology and benefit from the flywheel of
 5 innovation, and further erecting barriers to entry. This results in even if Plaintiffs and Class
 6 members only purchased one of Google's Maps APIs, then they still have been victims of
 7 anticompetitive harm and damages from Google's monopolization through having paid prices
 8 or expended monetary credits for them, that would have been cheaper, but for the
 9 anticompetitive actions that strangled out competition. The anticompetitive actions in totality
 10 are alleged to enhance and at the least, maintain Google's monopoly power in the Digital Maps
 11 API Market itself as well.

12 467. The alleged anticompetitive action in totality forecloses competition on the merits
 13 in the Digital Maps APIs Market, Digital Places APIs Market, and Digital Routes APIs Market.

14 468. Even if a Plaintiff or Class member purchased only one of Google's Maps APIs,
 15 Places APIs, or Routes APIs, although they would not have standing to sue under the Sherman
 16 Act Sections 1 and 3 and Clayton Act Section 3 tying claims, they would still have standing to
 17 sue under the Sherman Act Section 1 and Clayton Act Section 3 exclusive dealing claims and
 18 the Sherman Act Section 2 claims in totality for monopolization or attempted monopolization,
 19 because the anticompetitive actions in totality are alleged to have caused consolidation in the
 20 Digital Maps API Market, Digital Places API Market, and Digital Routes API Market, and this
 21 has enabled Google Maps to charge alleged supracompetitive prices, degrade quality and
 22 innovation, reduce output, supply, and variety, exclude competition, and elevate barriers to
 23 entry, resulting in supracompetitive prices and degraded quality in each of Google's Maps APIs,
 24 Places APIs, and Routes APIs, but for the alleged anticompetitive conduct.

25 469. Each of the Plaintiffs were damaged.

26 470. Each of the Plaintiffs seek damages and equitable, injunctive, and declarative
 27 relief.

471. Cognizable antitrust injury includes harm to a plaintiff's business or property, and property is a term that is broad and inclusive.

472. The monetary credits are property belonging to Plaintiffs and Class members, who receive those monetary credits from Google as consideration in exchange for which Defendants receive valuable data and increased users from Plaintiffs and Class members using Google's Maps APIs, Places APIs, and Routes APIs, data and usage from which Defendants monetize, in part through advertising, selling the data, or otherwise enhancing operations with access to that data.

The Monetary Credits Possessed by Plaintiffs and Class Members Constitute Their Property

473. Defendants provide monetary credits to Plaintiffs and Class members in exchange for enticing them to use Google’s Maps APIs, Places APIs, and Routes APIs on Plaintiffs and Class members’ digital property, such as apps, websites, and back-office operations. The monetary credits are not charity: the monetary credits are consideration given to Plaintiffs and Class members to use Google’s Maps APIs, Places APIs, and Routes APIs.

474. The monetary credits are the property of Plaintiffs and Class members upon the point when Plaintiffs and Class members use Google Maps' Maps APIs, Places APIs, and Routes APIs.

475. Indeed, Google Maps refers to the monetary credits with a \$ symbol before the figures.

476. The monetary credits given to Plaintiffs and Class members are property belonging to Plaintiffs and Class members. They are assets insuring benefits to Plaintiffs and Class members.

477. The anticompetitive schemes alleged herein have resulted in the diminution of value of the monetary credits that Defendants have provided to Plaintiffs and Class members. But for the anticompetitive schemes alleged herein, Plaintiffs and Class members would have been given more monetary credits or the monetary credits would have been more valuable. But for the anticompetitive schemes alleged herein, Plaintiffs and Class members would have

1 received more in terms of Google's Maps APIs, Places APIs, and Routes APIs, in exchange for
 2 the expended monetary credits.

3 478. The significant price hikes that Defendants have been able to impose as a result
 4 of the anticompetitive schemes alleged herein have also diminished the value of the monetary
 5 credits offered to Plaintiffs and Class members because the increased prices further deplete the
 6 monetary credits, the value of which correspond inversely to the prices of Google's Maps APIs,
 7 Places APIs, and Routes APIs. For example, \$200 of monetary credits are less valuable where
 8 the API that those credits may purchase are more expensive.

9 479. The value of the monetary credits can easily be quantified by the corresponding
 10 prices of the Maps APIs, Places APIs, and Routes APIs that they are exchanged for.

11 *Defendants Received Consideration in Exchange for the Monetary Credits That They
 12 Provided to Plaintiffs and the Class*

13 480. Defendants also received assets and property from offering the monetary credits
 14 to Plaintiffs and Class members: additional users and data.

15 481. In exchange for offering the monetary credits to Plaintiffs and Class members,
 16 Defendants receive a wealth of data from Plaintiffs and Class members. Defendants can generate
 17 revenue, cut costs, and generate earnings from having access to this data. An increased user base
 18 and the data that is captured from that can be monetized, in part, through advertising. For
 19 example, by collecting this data, assessing the data, and leveraging the data, Defendants can sell
 20 the data, sell advertising in connection with the data, and enable advertisers to target different
 21 campaigns and messages to different user groups.

22 482. There is cash value for the users that Google Maps secures and the data that
 23 Defendants receive from users of their Maps APIs, Places APIs, and Routes APIs, and which
 24 Defendants can quantify.

25 483. Defendants have a robust history of prioritizing securing data about businesses,
 26 in part through Google Maps.

27 484. Defendants have referred to Google Maps as a core search product for Google and
 28 a source for advertising.

1 485. Defendants use data, learned in part from Google Maps, to generate advertising
2 and connect users with relevant advertising.

3 486. Google's financial success results, in part, from its tracking and collection of
4 personal and sensitive user information, including, without limitation, data received from its
5 Maps APIs, Places APIs, and Routes APIs users (including Plaintiffs and Class members' data)
6 and selling and brokering that user information to optimize advertisement tools. A meaningful
7 component of Google's revenue is attributable to third party advertising, and Google is
8 continuously driven to find new ways to leverage access to users' data.

9 487. Google profits from the data it collects in several ways. One way is that Google
10 links communications and data to a user's profile or profiles, to enrich Google's ability to charge
11 its customers for advertisement-related tools. Google allegedly uses intercepted
12 communications and user data—in combination with the user's profile—to direct targeted
13 advertisements to consumers. And Google uses the results to improve Google's own algorithms
14 and technology. The data that Google collects contains users' web browsing information.
15 Google collects, reads, assesses the contents of, and organizes data based on users' prior
16 histories. Google creates profiles for each user and each device that accesses the Internet. With
17 all of this data, along with data secured through Google Maps, Google associates as much
18 information as possible with each profile because Google can profit from the several tools,
19 products, and services that it offers, such as ad-targeting services.

20 488. Data secured through Google Maps are a part of these collective profiles.

21 489. For example, it is stated on Google Maps webpages that when users use Maps
22 APIs, Places APIs, or Routes APIs, different types of data are sent with each user's request—
23 examples of which include the application name and version, authentication information, and
24 cross-application anonymous identifier information that is automatically sent with each user's
25 request. Google Maps has stated in its privacy policies and developer documentation that
26 developers implementing Google Maps' digital-mapping APIs enables Google Maps to receive
27 Internet Protocol ("IP") addresses of the user and the end user, geolocation information, and
28

1 search terms input by users when they initiate APIs calls.

2 490. The volume of data generated by Google's Maps APIs, Places APIs, and Routes
 3 APIs is massive. As of February 6, 2022, according to Google itself, more than 5 million
 4 websites and apps use the Google Maps Platform every week.

5 491. During the Class Period, Google Maps has been reported to have more than a
 6 billion users per month. This estimate has been disclosed by Google executives and analysts and
 7 has been consistent during the Class Period.

8 492. Defendants do not publicly disclose separate financial metrics for Google Maps.

9 493. Experienced analysts have estimated how Defendants make money, including, in
 10 part, through selling Maps APIs, Places APIs, and Routes APIs, through collecting data from
 11 Plaintiffs, Class members, and other types of users, and from advertising.

12 494. For example, Kamil Franek is a business analytics professional with over 15 years
 13 of experience who focuses on technology companies.¹⁵⁸ As of late 2019, Mr. Franek noted that
 14 Google Maps generates revenue through two primary sources: Google's Maps APIs, Places
 15 APIs, and Routes APIs fees, such as those generated from Plaintiffs and Class members, from
 16 which his analysis approximated annual revenues to have been between \$650 and \$800 million,
 17 with the highest of the range being \$1 billion; and advertising through Google Maps, whether
 18 through ads on top of maps search results and listings or custom-branded maps pins, from which
 19 his analysis approximated annual revenues to have been \$3.5 billion.

20 495. In support of the approximate \$3.5 billion in annual revenue generated from
 21 advertising through Google Maps, Mr. Franek as of late 2019 compared per-user revenues of
 22 approximately \$25 for Facebook, \$9.20 for Twitter, \$7.50 for YouTube, and \$3.10 for Pinterest.
 23 Mr. Franek used a conservative estimate of \$3.50 of anticipated revenue per user for Google
 24 Maps, at a time when Google Maps had approximately 1 billion active users. As of late 2019,

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 26
 27 ¹⁵⁸ <https://www.kamilfranek.com/>.
 28

1 Mr. Franek noted that Google Maps was pushing more avenues for advertising through Google
 2 Maps. The total estimated annual revenue generated from Google Maps, including APIs sales
 3 and advertising, as of late-2019 was \$4.3 billion. Mr. Franek estimated the annual revenue to
 4 double within a few years to \$9 billion. As a standalone business, Mr. Franek estimated Google
 5 Maps being valued at \$50 billion as of late-2019.

6 496. Another analyst, Brian Nowack of Morgan Stanley, has estimated Google Maps
 7 having generated annual revenues from its advertising of approximately \$2.95 billion in 2019
 8 and having projected annual revenue growth to approximately \$4.8 billion in 2020 and
 9 approximately \$11 billion in 2023.

10 497. One bank has estimated that as a standalone product, Google Maps' market
 11 capitalization could reach \$61.5 billion.¹⁵⁹

12 498. Google Maps also benefits from paid listings, displayed both through its own
 13 service and through Places APIs. One can zoom in on a map and search for restaurants, hotels,
 14 or any other businesses. A list of these businesses will appear. Advertising works in the sense
 15 that a paid listing will show up higher in the search results listing. Analysts have noted that a
 16 paid listing will also have a different color for its pin, and other types of custom branding on a
 17 pin. or attention provided to the business directly on a digital map.

18 499. Businesses can also be used as navigation points on a digital map, where the routes
 19 and directions expressly reference the business. This type of promotion can be another form of
 20 how Defendants monetize data and advertising through Google Maps.

21 500. An appealing attribute to advertisers through Google Maps is that typically when
 22 a user is searching for a location on Google Maps, they are conveying the type of company that
 23 they want to visit, the type of product or service, the time of the visit, and their location—all
 24 while often being ready to purchase the product or service. This data is extremely valuable for
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 27 ¹⁵⁹ House Antitrust Report, at 230, n. 1,379 (citing Ross Sandler, BARCLAYS, ALPHABET INC.,
 28 STEADY COMPOUNDER, WITH PLENTY OF INNOVATION AHEAD 20 (Mar. 28, 2017)
 (on file with the House Antitrust Subcommittee)).

1 effective advertising.

2 501. Google Maps derives vast benefits, in part through advertising, from having more
 3 users of the Google Maps Platform and having them use Maps APIs, Places APIs, and Routes
 4 APIs.

5 502. In a partially redacted complaint filed on May 27, 2020, by Mark Brnovich,
 6 Arizona's Attorney General, in the *Arizona v. Google LLC* litigation before the Honorable Judge
 7 Timothy Thomason of the Superior Court of the State of Arizona, Maricopa County (Civil
 8 Number 2020-006219), the Arizona Attorney General alleged that in consideration for the use
 9 of Google's software products, including, without limitation, Google Maps, Google can collect
 10 data from users, including, without limitation, location data, in order for Google to develop,
 11 maintain, and improve its products and services and deliver advertising, even where Google
 12 may offer those products and services for free to users (generally, the allegations were that data
 13 collection occurred without user consent or in a misleading manner and in violation of state
 14 laws). An example provided was that if a user searched for restaurants near the user in Google
 15 Maps, Google collects the search term and information about that activity, such as the user's
 16 location and IP address. The Arizona Attorney General alleged that testimony from Google's
 17 former Vice President of Product for Google Maps and then Vice President of Product for
 18 Google Ads, Jack Menzel, supported the allegations that Google is able to offer tools to users,
 19 including, without limitation, Google Maps, in exchange for collection of data, such as location
 20 data, that Google uses for its products and services and for advertising (even if those products
 21 or services are offered for free). (See, e.g., ¶¶ 25-26, 38, 56, 60, 80, 93, 141-43, 147, 150.)

22 503. Information collected through Google Maps, such as location data, helps give
 23 Defendants intimate user profiles, spanning billions of people and entities, which are a key
 24 source of Defendants' advantage in their advertising business and overall business.

25 *Further Evidence of the Value of the Monetary Credits*

26 504. Google derives value from user data. In 2012, Google publicly admitted that it
 27 utilized users' browsing data, paired with other sensitive and valuable personal information, to

1 achieve “nowcasting” or “contemporaneous forecasting,” which Google’s then-Chief
 2 Economist, Hal Varian, equated to the ability to predict what is happening as it occurs.¹⁶⁰

3 505. A 2015 article from TechCrunch accurately noted that “Data has become a
 4 strategic asset that allows companies to acquire or maintain a competitive edge.”¹⁶¹ That article
 5 noted that the value of a single Internet user—or really, a single user’s data—varied from about
 6 \$15 to more than \$40.

7 506. In 2016, Professors Alessandro Acquisti, Curtis Taylor, and Liad Wagman
 8 published an article in the Journal of Economic Literature, entitled “*The Economics of Privacy*,”
 9 in which they stated the following, in part:

10 Such vast amounts of collected data have obvious and substantial economic value.
 11 Individuals’ traits and attributes (such as a person’s age, address, gender, income,
 12 preferences, and reservation prices, but also her clickthroughs, comments posted
 13 online, photos uploaded to social media, and so forth) are increasingly regarded as
 business assets that can be used to target services or offers, provide relevant
 advertising, or be traded with other parties.¹⁶²

14 507. On June 6, 2018, Maria LaMagna published an article on MarketWatch entitled
 15 “*The sad truth about how much your Facebook data is worth on the dark web*,” in which study
 16 results found that a user’s online identity and data can be sold for \$1,200 on the dark web.¹⁶³

17 508. Furthermore, the California Consumer Privacy Act of 2018, CAL. CIV. CODE §
 18 1798.100, *et seq.* (“CCPA”), recognizes that consumers’ personal data is a property right. Not
 19 only does the CCPA prohibit covered businesses from discriminating against consumers that
 20 opt-out of data collection, the CCPA also expressly provides the following, in part: “A business
 21 may offer financial incentives, including payments to consumers as compensation, for the

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 23 ¹⁶⁰ K.N.C., *Questioning the searches*, THE ECONOMIST, June 13, 2012,
 24 <https://www.economist.com/schumpeter/2012/06/13/questioning-the-searchers>.

25 ¹⁶¹ Pauline Glickman and Nicolas Gladys, *What’s the Value of Your Data?* TechCrunch, Oct. 13,
 2015, <https://techcrunch.com/2015/10/13/whats-the-value-of-your-data/>.

26 ¹⁶² Alessandro Acquisti, Curtis Taylor, and Liad Wagman, *The Economics of Privacy*, 54 J. of
 27 Econ. Literature 2, at 444 (June 2016),
<https://www.heinz.cmu.edu/~acquisti/papers/AcquistiTaylorWagman-JEL-2016.pdf>.

28 ¹⁶³ <https://www.marketwatch.com/story/spooked-by-the-facebook-privacy-violations-this-is-how-much-your-personal-data-is-worth-on-the-dark-web-2018-03-20>.

1 collection of personal information, the sale of personal information, or the deletion of personal
 2 information. A business may also offer a different price, rate, level, or quality of goods or
 3 services to the consumer if that price or difference is directly related to the value provided to the
 4 business by the consumer's data." CAL. CIV. CODE § 1798.125(b)(1). The CCPA provides that
 5 "[a] business shall not use financial incentive practices that are unjust, unreasonable, coercive,
 6 or usurious in nature." CAL. CIV. CODE § 1798.125(b)(4).

7 509. Although Plaintiffs do not allege claims for relief under the CCPA, the language
 8 therein further supports the allegations that the monetary credits that Google Maps offered
 9 Plaintiffs and Class members are property belonging to Plaintiffs and Class members, in
 10 exchange for which Plaintiffs and Class members have provided Defendants with valuable data,
 11 which Defendants have monetized in several ways. Property is the right of any person to possess,
 12 use, enjoy, or dispose of a thing, including intangible things, such as data or communications.
 13 User data, including the data that Plaintiffs and Class members have transmitted to Google
 14 through using Maps APIs, Places APIs, and Routes APIs, is property under California law that
 15 Plaintiffs and Class members gave Google Maps in consideration for the Google Maps monetary
 16 credits provided to Plaintiffs and Class members, which is also property. The data that Plaintiffs
 17 and Class members transmitted to Google through use of Maps APIs, Places APIs, and Routes
 18 APIs has transactional or barter value, and Defendants recognize this by having exchanged in
 19 consideration for that data the monetary credits to use Maps APIs, Places APIs, and Routes
 20 APIs.

21 510. Such data is viewed as a form of currency in the e-commerce industry, and the
 22 cash value of such data is regularly quantified within Defendants' records and in ecommerce
 23 more generally.

24 511. For example, Google itself has set up a project called Google Screenwise Trends
 25 that paid users to add a browser extension that shared with Google the sites that users visited
 26 and how users used the sites. Google has paid the participants up to \$3 per week to have been
 27
 28

1 tracked and with gift cards of monetary credits.¹⁶⁴

2 512. Examples of companies monetizing user data are not limited to Google. Brave has
 3 offered a web browser that paid users to watch online targeted ads, while blocking out
 4 everything else.¹⁶⁵ Reklaim has exchange platforms that allow users to sell their data to third-
 5 party apps and websites.¹⁶⁶ Former U.S. presidential candidate Andrew Yang's "Data Dividend
 6 Project" aims to help users "[t]ake control of your personal data. If companies are profiting from
 7 it, you should get paid for it."¹⁶⁷ BIGtoken "is a platform to own and earn from your data. You
 8 can use the BIGtoken application to manage your digital data and identity and earn rewards
 9 when your data is purchased."¹⁶⁸ Caden Inc. operates an app that aims to offer users a range of
 10 payment options, ranging from \$5 per month, \$20 per month, and even thousands of dollars a
 11 year, for access to users' data, as reported in an article by Megan Graham of the Wall Street
 12 Journal dated December 20, 2022, entitled "This New App Wants to Pay You to Share Your
 13 Data for Advertising," and noting that the idea of paying users for data was not new.¹⁶⁹ The
 14 Nielsen Company, which is known for tracking television viewers' behavior, has extended its
 15

16¹⁶⁴ See Jack Marshall, *Google Pays Users for Browsing Data*, DigiDay, Feb. 10, 2012,
<https://digiday.com/media/google-pays-users-for-browsing-data/>.

17¹⁶⁵ Get Paid to Watch Ads in the Brave Web Browser, at: <https://lifehacker.com/get-paid-towatch-ads-in-the-brave-web-browser-1834332279#:~:text=Brave%2C%20a%20chromiumbased%20web%20browser%20that%20boasts%20an,a%20more%20thoughtful%20way%20than%20we%20%80%99re%20accustomed%20to> (Lifehacker, April 26, 2019) ("The model is entirely opt-in, meaning that ads will be disable by default. The ads you view will be converted into Brave's cryptocurrency, Basic Attention Tokens (BAT), paid out to your Brave wallet monthly").

18¹⁶⁶ <https://killi.io/earn/>.

19¹⁶⁷ How Does It Work, at: <https://www.datadividendproject.com/> ("Get Your Data Dividend ... We'll send you \$\$\$ as we negotiate with companies to compensate you for using your personal data.").

20¹⁶⁸ https://bigtoken.com/faq#general_0 ("Third-party applications and sites access BIGtoken to learn more about their consumers and earn revenue from data sales made through their platforms. Our BIG promise: all data acquisition is secure and transparent, with consumers made fully aware of how their data is used and who has access to it.").

21¹⁶⁹ Megan Graham, *This New App Wants to Pay You to Share Your Data for Advertising*, WALL ST. J. (Dec. 20, 2022), https://www.wsj.com/articles/this-new-app-wants-to-pay-you-to-share-your-data-for-advertising-11671490542?mod=hp_minor_pos1.

1 reach to computers and mobile devices through the Nielsen Computer and Mobile Panel. By
 2 installing the application on a computer, phone, tablet, e-reader, or other mobile device, Nielsen
 3 tracks user activity, enters users into sweepstakes with monetary benefits, and enables users to
 4 earn points worth up to \$50 per month.¹⁷⁰

5 13. Ultimately, the monetary credits of \$200 per month that Google offers as
 6 consideration to Plaintiffs and Class members to use its Maps APIs, Places APIs, and Routes
 7 APIs is the following: (i) a property interest that is capable of precise definition—Google Maps
 8 itself quantifies the value, and its value is inversely related to the amount of Maps APIs, Places
 9 APIs, and Routes APIs that it can be exchanged for; (ii) are ascribed to each direct user of the
 10 Google Maps Platform, over which only that user can expend on the Google Maps Platform;
 11 and (iii) entitle Plaintiffs and Class members to a legitimate claim to those monetary credits
 12 when deciding to use Google Maps' Maps APIs, Places APIs, and Routes APIs, who give in
 13 return to Google Maps valuable usage data, that Defendants can monetize in several ways,
 14 including, without limitation, advertising. In many cases, such user's data provides the context
 15 for targeted advertising for Google, where Google combines the URL that the user is viewing
 16 with what Google knows about that user (for example, through location data and geolocation),
 17 to target the user in the context of the user's web experience. Because of Google's pervasive
 18 presence on the Internet and its unparalleled reach and uncanny ability to target users, advertisers
 19 are willing to pay a premium for Google's advertisement tools.

20 *Anticompetitive Actions Are Occurring on Plaintiffs' Property and on Plaintiffs' Apps
 21 and Websites, Not on Defendant's Property, Apps, Websites, or Platforms.*

22 514. Once Plaintiffs and Class members purchase or expend monetary credits to get
 23 Google's Maps APIs, Places APIs, or Routes APIs, those APIs enable Plaintiffs and Class
 24 members to use them on Plaintiffs and Class members' own websites, apps, or back-office
 25 procedures, which is their own property. The Maps APIs, Places APIs, or Routes APIs do not

27 ¹⁷⁰ Kevin Mercandante, *Ten Apps for Selling Your Data for Cash*, Best Wallet Hacks, June 10,
 28 2020, <https://wallethacks.com/apps-for-selling-your-data/>.

1 remain as Google Maps' property after Plaintiffs and Class members purchase or expend
 2 monetary credits for them; at that point of purchase or monetary-credit expenditure, the Maps
 3 APIs, Places APIs, or Routes APIs become the property of Plaintiffs and Class members. The
 4 Maps APIs, Places APIs, or Routes APIs become Plaintiffs and the Class members' content at
 5 that point, not Google Maps' content. Plaintiffs and Class Members use the Maps APIs, Places
 6 APIs, or Routes APIs on their own digital property, such as their apps or websites. The Maps
 7 APIs, Places APIs, or Routes APIs at that point are not being used on Google's own property,
 8 app, website, platform, or network.

9 515. The negative tying, exclusive dealing, and other anticompetitive actions are being
 10 committed not in connection with Google's property, website, platform, or network. Instead, the
 11 alleged negative tying, exclusive dealing, and other anticompetitive actions are being committed
 12 in connection with Plaintiffs and Class members' property, such as apps or websites, in terms
 13 of the Maps APIs, Places APIs, and Routes APIs, which became Plaintiffs and Class members'
 14 property after they purchased or expended monetary credits for them.

15 516. In contrast, this is not a fact pattern where Plaintiffs and Class members are using
 16 Google's Maps APIs, Places APIs, or Routes APIs on Defendants' own apps or websites and
 17 merely seeking to use those Maps APIs, Places APIs, or Routes APIs in different ways or with
 18 different designs on Defendants' own property, apps, or websites.

19 517. The anticompetitive actions do not concern how Plaintiffs or Class members use
 20 or view Maps APIs, Places APIs, or Routes APIs on Defendants' own property, apps, or
 21 websites.

22 518. It is Plaintiffs and Class members' property—the Maps APIs, Places APIs, or
 23 Routes APIs used on their own apps or websites—that Defendants seek to control by
 24 anticompetitive means.

25 519. The anticompetitive actions here—negative tying, exclusive dealing, self-
 26 preferencing, and monopolization (or in the alternative, attempted monopolization)—effectuate
 27 a scheme where Google Maps is strangling out the already thin ranks of competitors for

1 supplying maps APIs, places APIs, or routes APIs to any website, app, or property belonging to
 2 Plaintiffs and Class members, all outside Defendants' own property, apps, websites, platforms,
 3 or networks.

4 520. This class action is not about Google Maps or Defendants forbidding one
 5 competitor or a few competitors from engaging in commercial operations on user's profiles on
 6 Google Maps or Defendants' own property, apps, websites, platforms, or networks. It is a
 7 blanket prohibition against all competitors, not just a select few, all over the Internet and all over
 8 digital properties.

9 521. Defendants' anticompetitive actions prohibit what Plaintiffs, Class members, and
 10 Google Maps' competitors can do on Plaintiffs and Class members' own apps, websites, and
 11 other property outside of Google Maps.

12 522. To the extent that Defendants may insist that its negative tying, exclusive dealing,
 13 self-preferencing, and monopolization (or in the alternative, attempted monopolization) is
 14 immune from antitrust laws merely because they are just dictating the terms as to how Plaintiffs
 15 and Class members can use Google's Maps APIs, Places APIs, and Routes APIs, those
 16 arguments are factually inaccurate.

17 523. The alleged anticompetitive terms and enforcement do not concern how Plaintiffs
 18 and Class members use Google's Maps APIs; instead, the alleged anticompetitive terms and
 19 enforcement concern Plaintiffs and Class members being unable to use nor link competitors'
 20 places APIs or routes APIs.

21 524. The anticompetitive negative tying restrictions in the Terms of Service
 22 complained of herein do not concern the dictation of how Plaintiffs and Class members control,
 23 use, or design the Maps APIs that they had already purchased or expended monetary credits for
 24 from Google Maps. The control, use, or design of those Maps APIs that Plaintiffs and Class
 25 members purchased or expended monetary credits for from Google Maps is not what Defendants
 26 aim to dictate. Instead, the negative tying is aimed at forbidding Plaintiffs and Class members,
 27 who had already purchased or expended monetary credits for Maps APIs from Google, from
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1 also purchasing, using, or linking places APIs or routes APIs from competitors with the already-
 2 purchased Maps APIs from Google. It is negative tying to force Plaintiffs and Class members
 3 to purchase or expend monetary credits for additional Places APIs or Routes APIs from Google
 4 Maps that were preferred to have been purchased or used from competitors. It is part of the
 5 anticompetitive schemes in totality to force Plaintiffs and Class members to exclusively use the
 6 Google Maps ecosystem and strangle out already-dwindling competition to Google Maps.

7 525. It is not the control, use, or design of the Maps APIs already purchased or
 8 monetary-credit expended from Google Maps that is the true goal of the negative tying in the
 9 Terms of Service; instead, it is the goal of forcing Plaintiffs and Class members to purchase or
 10 expend monetary credits for additional Places APIs or Routes APIs that otherwise would have
 11 been purchased from competitors or the forcing of Plaintiffs and Class members to not purchase
 12 those additional Places APIs or Routes APIs at all, whether from competitors or not.

13 526. Defendants cannot avoid antitrust laws merely by dictating policies.

14 (i) *Plaintiff Dream*

15 527. Due to the negative tying, exclusive dealing, and other alleged anticompetitive
 16 actions herein, once Plaintiff Dream purchased Google's Maps APIs, Dream could not use nor
 17 link any of competitors' Places APIs or Routes APIs.

18 528. The digital-mapping APIs to form the base of a digital map for Dream are maps
 19 APIs. Google's Maps APIs thus are alleged to be the tying product. Google Maps' monopoly
 20 share of the Digital Maps API Market, the barriers to entry that keep existing competitors and
 21 potential new ones at bay, and the sheer data advantage that Google has, especially in connection
 22 with its Maps APIs, considering, for example, the cross-app data sharing within the panoply of
 23 Google's other apps and tools, and with Google Maps being a default app on Android mobile
 24 phones, which gives Google Maps an additional advantage over competitors, are all reasons
 25 why Dream cannot feasibly avoid Google's Maps APIs in totality.

26 529. During the Class Period, Dream has reviewed, assessed, and searched for places
 27 APIs and routes APIs from competitors, including, without limitation, Bing, HERE, and
 28

1 Mapbox, and Dream still wants to use places APIs or routes APIs from those competitors, in
 2 combination with Google's Maps APIs that Dream has used during the Class Period. The
 3 reasons for the search for competitors' places APIs and routes APIs are because they are
 4 relatively cheaper than Google's Places APIs or Routes APIs, and Dream believes that
 5 competitors' places APIs or routes APIs offer extra features or at the least, have comparable, if
 6 not better, quality.

7 530. Due to the Terms of Service and other anticompetitive actions alleged herein,
 8 Dream was unable to use any of Bing, HERE, and Mapbox's (among others) places APIs or
 9 routes APIs, in conjunction with any of Google's Maps APIs. Once Dream started using any of
 10 Google's Maps APIs, Dream must have foregone using any of competitors' preferred places
 11 APIs or routes APIs.

12 531. Dream was forced to continue purchasing and expending monetary credits on
 13 unwanted Google's Places APIs or Routes APIs.

14 532. But for the anticompetitive conduct alleged herein, including, without limitation,
 15 negative tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative,
 16 attempted monopolization), Dream would have preferred to explore, use, and link competitors'
 17 places APIs or routes APIs with Google's Maps APIs. At the least, Dream would have preferred
 18 to explore, use, and link either of places APIs or routes APIs from competitors such as, for
 19 example, Bing, HERE, or Mapbox.

20 533. There is sufficient demand from Dream to purchase or expend monetary credits
 21 for Google's Maps APIs and competitors' places APIs and routes APIs—even to use places
 22 APIs and routes APIs for free from competitors other than Google Maps—to link and use
 23 together on one app, on one webpage, on one website, or on one other type of digital display or
 24 screen for Dream's customers or potential customers to view on one app, on one webpage, on
 25 one website, or on one other type of digital display or screen.

26 534. But Defendants' anticompetitive schemes alleged herein render it infeasible from
 27 an economic perspective—and indeed, forbidden from a contractual perspective—for Dream to
 28

1 purchase or expend monetary credits for any of Google's Maps APIs and use and link a
2 competitors' places APIs or routes APIs in such a fashion. Dream has been forced to use only
3 Google's Maps APIs, Places APIs, or Routes APIs, to the exclusion of competitors' places APIs
4 or routes APIs.

5 535. It would not make economic nor practical sense for Dream to create one digital
6 map using only Google's Maps APIs and then create an entirely separate and unlinked digital
7 map using only competitors' places APIs or routes APIs. Users would be confused, frustrated,
8 and abandon the app if they were made to navigate between two entirely different and unlinked
9 digital-map experiences. It does not make economic nor practical sense for Dream to devote
10 money, monetary credits, time, effort, or digital real estate to (i) display on one app, on one
11 webpage, on one website, or on one other type of digital display or screen for Dream's customers
12 or potential customers to view a digital map created from purchased or monetary-credit-
13 expended Maps APIs from Google, and then also (ii) use places APIs or routes APIs from
14 competitors on an entirely separate and unlinked app, webpage, website, or digital display or
15 screen for Dream's customers or potential customers to view.

16 536. The ability to use and link maps APIs, places APIs, or routes APIs together on
17 one digital screen or display on one app, webpage, or website is critical to the user's experience
18 and to the likelihood of the user's patronage of Dream. If the user is required to view the maps
19 APIs, places APIs, or routes APIs on entirely separate and unlinked screens, that user would
20 simply abandon the app, webpage, or website or stop interacting with it altogether. Routing
21 users to an entirely separate and unlinked app, webpage, website, or digital screen is not a
22 reasonable substitute. The competitive alternative and best use for all stakeholders—Plaintiffs
23 and Class members, indirect users, and competition generally—is for Dream to have Google's
24 Maps APIs and competitors' places APIs and routes API used and linked on one digital screen
25 or display on one app, webpage, or website.

26 537. Once Dream had used one of Google's Maps APIs, it has been locked into Google
27 Maps' ecosphere and cannot unwind or disband the digital mapping created without substantial
28

1 cost, in terms of money, time, and effort, as well as the opportunity cost of having mapping
 2 unavailable to the public, that renders the process infeasible. It does not make financial sense
 3 nor is worth the time, effort, and risk of shutting down or disbanding the app, webpage, or
 4 website to switch to an entirely new digital map based totally on non-Google Maps' digital-
 5 mapping APIs. Part of the risk is the loss of patronage while the app, webpage, or website is
 6 being rebuilt.

7 538. Dream knew that it could not violate the TOS because it was dealing with Google.
 8 Violations of the TOS are under Google Maps' watchful eye. Under the TOS Section 1.4,
 9 customers must provide to Google Maps each authorized domain and app that uses any of
 10 Google's Maps APIs, Places APIs, or Routes APIs. Under the TOS Section 3.2.2(c), at Google's
 11 request, customers must submit their domains, apps, and projects to Google for review to ensure
 12 compliance. And under the TOS Section 5.1, Google may suspend Google's Maps APIs, Places
 13 APIs, and Routes APIs without prior notice if customers breach the TOS.

14 539. Throughout the Class Period, Dream spent approximately at least (i) \$6.53 on
 15 Google's Maps APIs, including, without limitation, on the Maps API, Dynamic Maps API, and
 16 Dynamic Street View API, (ii) \$40.51 on Google's Places APIs, including, without limitation,
 17 the Autocomplete – Per Request, Autocomplete without Places Details – Per Session,
 18 Geocoding API, Places API, Places Details API, Atmosphere Data API, and Contact Data API,
 19 and (iii) \$1,394.36 on Google's Routes APIs, including, without limitation, the Distance Matrix
 20 API, Distance Matrix Advanced API, and Directions API. This equates to approximately
 21 \$1,441.40 spent in total.¹⁷¹

22 540. During the Class Period, for Dream's account, it was given monetary credits up
 23 to a maximum of \$200 per month. This meant that each month, if total spending on any of or
 24 the combination of all three of Maps APIs, Places APIs, and Routes APIs—added together—

25
 26
 27 ¹⁷¹ Dream's expenditure on Google's Maps APIs, Places APIs, and Routes APIs alleged herein
 28 occurred during the Class Period and well before Dream retained Plaintiffs' counsel in connection
 with this action.

1 was over \$200, then the \$200 applied to the total spending for Maps APIs, Places APIs, and
 2 Routes APIs, and then Dream was billed for the remainder. The monetary credits were fungible
 3 in terms of whether they were expended on Maps APIs, Places APIs, and Routes APIs. The
 4 \$200 in monetary credits were not designated to be expended in certain proportion to any of the
 5 Maps APIs, Places APIs, or Routes APIs nor were they earmarked to be expended on any one
 6 of the Maps APIs, Places APIs, or Routes APIs in particular; instead, once spending for any of
 7 the three or all three combined was over \$200, then the monetary credits simply applied to all
 8 three, with the remainder being billed to Dream. More monetary credits having been expended
 9 on any one of the Maps APIs, Places APIs, or Routes APIs merely resulted in additional money
 10 having been spent on the other of the Maps APIs, Places APIs, or Routes APIs. Dream spent at
 11 least \$456.64 in monetary credits during the Class Period.

12 541. The monetary credits had value to Dream, which Dream received in consideration
 13 for providing Defendants with valuable data about its use and that of its app or website visitors
 14 when using Google's Maps APIs, Places APIs, and Routes APIs. Such data provided value to
 15 Defendants in several ways, including, without limitation, through helping Defendants monetize
 16 the data or through advertising efforts.

17 542. Dream spent approximately at least \$984.76 in total above the monetary credits
 18 in expenditure for Google's Maps APIs, Places APIs, and Routes APIs, which was calculated
 19 by adding together the \$6.53 spent on Maps APIs, \$40.51 spent on Places APIs, and \$1,394.36
 20 spent on Routes APIs, equating to \$1,441.40, and then subtracting the \$456.64 in monetary
 21 credits from that, equating to \$984.76.

22 (ii) *Plaintiff Getify*

23 543. Plaintiff Getify developed an app called "RestaurNote" that allowed users to make
 24 notations about experiences that related to their physical location, among other uses. For
 25 instance, if a user had a memorable meal at a restaurant and wanted to order it again—or ordered
 26 poorly and wanted to avoid the error next time—the user could make a note for the next time
 27 that the user went to that restaurant and for other users' observations. A mobile web app is
 28

1 intended for use on mobile devices (such as phones or tablets) and is built using web
 2 technologies (as opposed to native mobile apps that are built for Android or iOS).

3 544. RestaurNote is intended to be a free app for consumers. And Google Maps'
 4 original pricing structure provided for this: Google provided sufficient monetary credits for
 5 Maps APIs, Places APIs, and Routes APIs that even moderately sized businesses could expect
 6 to rarely exceed and even if so, could reasonably budget for. RestaurNote's strategy was not to
 7 sell consumers' data to restaurants or other venues; instead, its strategy was to offer
 8 businesses—restaurants or other venues—options to send targeted coupons and other
 9 promotions to consumers on the app for a fee that those businesses would pay to RestaurNote.
 10 For example, for a monthly fee to RestaurNote, businesses could upload their information—for
 11 example, menus—onto RestaurNote.

12 545. However, in the middle of 2018 (as alleged above), Google Maps announced a
 13 drastic change in its pricing and monetary-credit structure that significantly impacted the amount
 14 that RestaurNote would pay. Given that RestaurNote was intended to be a free app to consumers,
 15 this made the app unworkable, and Getify indefinitely paused its development once the app was
 16 stable and usable, with limited access given to family and friends to keep fees from Google
 17 Maps under control. This was despite the fact that Getify ran through substantial amounts of
 18 monetary credits offered by Google Maps in order to induce it to use digital-mapping APIs, and
 19 Getify expended significant time, effort, and costs to have developed the app to launch.

20 546. The increased costs to RestaurNote under the new pricing and monetary-credit
 21 structure of Google's Maps APIs, Places APIs, and Routes APIs were too high and without
 22 limits and thus rendered RestaurNote relatively obsolete in the sense that Getify has opened it
 23 only to a select few family and friends; absent the anticompetitive actions alleged herein,
 24 RestaurNote would have been able to have been launched for consumers (aside from family and
 25 friends) and marketed to businesses.

26 547. Due to the negative tying, exclusive dealing, and other alleged anticompetitive
 27 actions, once Plaintiff Getify used Google's Maps APIs, Getify could not use any of
 28

1 competitors' Places APIs or Routes APIs.

2 548. The digital-mapping APIs to form the base of a digital map for Getify are maps
 3 APIs. Google's Maps APIs thus are alleged to be the tying product. Google Maps' monopoly
 4 share of the Digital Maps API Market, the barriers to entry that keep existing competitors and
 5 potential new ones at bay, and the sheer data advantage that Google has, especially in connection
 6 with its Maps APIs, considering, for example, the cross-app data sharing within the panoply of
 7 Google's other apps and tools, and with Google Maps being a default app on Android mobile
 8 phones, which gives Google Maps an advantage over competitors, are all reasons why Getify
 9 cannot feasibly avoid Google's Maps APIs in totality

10 549. During the Class Period, Getify has reviewed, assessed, and searched for places
 11 APIs and routes APIs from competitors, including, without limitation, OpenStreetMaps (a free
 12 provider), Mapbox, USGS, 51-Degrees, and Telenav, and Getify still wants to use and link
 13 places APIs and routes APIs from those competitors with Google's Maps APIs that Getify has
 14 used during the Class Period. The reason for the search for competitors' places APIs and routes
 15 APIs is because they are relatively cheaper than Google's Places APIs or Routes APIs, and
 16 Getify believes that competitors' places APIs or routes APIs offer extra features or at the least,
 17 have comparable, if not better, quality. According to Getify in particular, Google's Places APIs
 18 are the most egregiously overpriced, because they are otherwise rudimentary, nonproprietary,
 19 and commodity-type data, and competitors offer better quality places APIs than Google Maps.
 20 Overall, Getify has observed Google Maps to be the most expensive option, while competitors
 21 offer places APIs and routes APIs at materially cheaper prices—or even for free.

22 550. Due to the Terms of Service and other anticompetitive actions alleged herein,
 23 Getify was unable to use any of OpenStreetMaps (a free provider), Mapbox, Mapquest, USGS,
 24 51-Degrees, and Telenav's (among others) places APIs or routes APIs. Once Getify started
 25 using any of Google's Maps APIs, Getify must have foregone using any of competitors'
 26 preferred places APIs or routes APIs.

27 551. Getify was forced to continue purchasing and expending monetary credits on
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1 unwanted Google's Places APIs, and Getify was forced to not use routes APIs at all, although
 2 Getify wanted to use routes APIs for RestaurNote. Getify could not afford to use Google's
 3 Routes API.

4 552. But for the anticompetitive conduct alleged herein, including, without limitation,
 5 negative tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative,
 6 attempted monopolization), Getify would have preferred to explore, use, and link competitors'
 7 places APIs or routes APIs with Google's Maps APIs. Getify cannot afford to use Google's
 8 Routes APIs and cannot use competitors' routes APIs because Getify is already using Google's
 9 Maps and Places APIs, so Getify does not use routes APIs at all.

10 553. There is sufficient demand from Getify to purchase or expend monetary credits
 11 for Google's Maps APIs and competitors' places APIs and Routes APIs—even to use the places
 12 APIs and routes APIs for free from competitors other than Google Maps—to link and use
 13 together on one app, on one webpage, on one website, or on one other type of digital display or
 14 screen for Getify's customers or potential customers to view on one app, on one webpage, on
 15 one website, or on one other type of digital display or screen.

16 554. But Defendants' anticompetitive schemes alleged herein render it infeasible from
 17 an economic perspective—and indeed, forbidden from a contractual perspective—for Getify to
 18 purchase or expend monetary credits for Google's Maps APIs and use and link a competitors'
 19 places APIs or routes APIs in such a fashion. Getify has been forced to use only Google's Maps
 20 APIs and Places APIs—to the exclusion of competitors' places APIs or routes APIs.

21 555. It would not make economic nor practical sense for Getify to create one digital
 22 map using only Google's Maps APIs and then create an entirely separate and unlinked digital
 23 map using only competitors' places APIs or routes APIs. Users of the app would be confused,
 24 frustrated, and abandon the app if they were made to navigate between two entirely different
 25 and unlinked digital-map experiences. It does not make economic nor practical sense for Getify
 26 to devote money, monetary credits, time, effort, or digital real estate to (i) use on one app, one
 27 webpage, one website, or one other type of digital display or screen for Getify's customers or
 28

1 potential customers to view a digital map created from purchased or monetary-credit-expended
 2 Maps APIs from Google Maps, and then also (ii) use places APIs or routes APIs from
 3 competitors on an entirely separate and unlinked app, webpage, website, or other separate and
 4 unlinked type of digital display or screen for Getify's customers or potential customers to view.

556. The ability to use maps APIs, places APIs, or routes APIs together and linked on
 6 one digital screen or display on one app, webpage, or website is critical to the user's experience
 7 and to the likelihood of the user's patronage of Getify and RestaurNote. If the user is required
 8 to view the maps APIs, places APIs, or routes APIs on entirely separate and unlinked screens,
 9 that user would simply abandon the app, webpage, or website or stop interacting with it
 10 altogether. Routing users to an entirely separate and unlinked app, webpage, website, or digital
 11 screen is not a reasonable substitute. The competitive alternative and best use for all
 12 stakeholders—Plaintiffs and Class members, indirect users, and competition broadly—is for
 13 Getify to have Google's Maps APIs and competitors' places APIs and routes APIs linked on
 14 one digital screen or display on one app, webpage, or website.

557. Once Getify has used Google's Maps APIs, it has been locked into Google Maps'
 16 ecosystem and cannot unwind or disband the digital mapping created without substantial cost,
 17 in terms of money, time, and effort, as well as the opportunity cost of having mapping
 18 unavailable to the public, that renders the process infeasible. It does not make financial sense
 19 nor is worth the time, effort, and risk of shutting down or disbanding RestaurNote to switch to
 20 an entirely new digital map based totally on non-Google Maps' APIs. Part of the risk is the loss
 21 of patronage while the app, webpage, or website is being rebuilt.

558. Getify knew that it could not violate the TOS because it was dealing with Google.
 23 Violations of the TOS are under Google Maps' watchful eye. Under the TOS Section 1.4,
 24 customers must provide to Google Maps each authorized domain and app that uses any of
 25 Google's Maps APIs, Places APIs, or Routes APIs. Under the TOS Section 3.2.2(c), at Google's
 26 request, customers must submit their domains, apps, and projects to Google for review to ensure
 27 compliance. And under the TOS Section 5.1, Google may suspend Google's Maps APIs, Places

1 APIs, and Routes APIs without prior notice if customers breach the TOS.

2 559. Throughout the Class Period, Getify spent approximately at least (i) \$32.42 on
 3 Google's Maps APIs, including, without limitation, on the Dynamic Maps API and Maps Static
 4 API, and (ii) \$0.53 on Google's Places APIs, including, without limitation, the Places API,
 5 Places Details API, Atmosphere Data API, and Contact Data API. This equates to approximately
 6 \$32.95 spent in total.¹⁷²

7 560. Throughout the Class Period, Getify spent at least \$15.22 in monetary credits. The
 8 monetary credits were fungible in terms of whether they were expended on Maps APIs or Places
 9 APIs. The monetary credits were not designated to be expended in certain proportion to any of
 10 the Maps APIs or Places APIs nor were they earmarked to be expended on any one of the Maps
 11 APIs or Places APIs in particular; instead, the monetary credits simply applied to both, with the
 12 remainder being billed to Getify. More monetary credits having been expended on any one of
 13 the Maps APIs or Places APIs merely resulted in additional money having been spent on the
 14 other of the Maps APIs or Places APIs.

15 561. The monetary credits had value to Getify, which Getify received in consideration
 16 for providing Defendants with valuable data about its use and that of RestaurNote's users when
 17 using Google's Maps APIs and Places APIs. Such data provided value to Defendants in several
 18 ways, including, without limitation, through helping Defendants monetize the data or through
 19 advertising efforts.

20 562. Getify spent approximately at least \$17.73 in total above the monetary credits in
 21 expenditure for Google's Maps APIs and Places APIs, which was calculated by adding together
 22 the \$32.42 spent on Maps APIs and \$0.53 spent on Places APIs, equating to \$32.95, and then
 23 subtracting the \$15.22 in monetary credits from that, equating to \$17.73.

24 563. Getify notes that there are several competitive advantages for Plaintiffs and Class
 25 members (and their indirect users) to be allowed to use Google's Maps APIs linked with

27 ¹⁷² Getify's expenditure on Google's Maps APIs and Places APIs alleged herein occurred during
 28 the Class Period and well before Getify retained Plaintiffs' counsel in connection with this action.

1 competitors' places APIs or routes APIs, on a single digital map available on an app or website.

2 564. Google's anticompetitive actions also disable Getify from having a fallback
 3 backup for RestaurNote, which is the ability for an app to continue working in the event of a
 4 failure of APIs that it relies upon. This need for a fallback backup was experienced recently
 5 from Google Maps' shutdown, where Google Maps' alleged anticompetitive actions disabled
 6 RestaurNote from having such a fallback backup. It is industry standard practice for app or
 7 website developers to avoid a single point of failure design, which is the ability to avoid a single
 8 external provider of APIs for critical functionality. Digital-mapping APIs are such critical
 9 functionality for Getify and RestaurNote. When a digital-mapping API provider shuts down or
 10 is performing slowly or poorly, as Google Maps had recently, RestaurNote should be able to
 11 rely on alternative providers. But it cannot because of the anticompetitive conduct alleged
 12 herein.

13 565. Getify and RestaurNote are also disabled from caching Google's Maps APIs and
 14 Places APIs. Caching is the temporary storage of data retrieved from a provider, such as Google
 15 Maps, for varying periods of time. This is an important strategy that many apps and websites
 16 employ, in order to reduce the amount of repeat (and thus wasted and costly) re-accessing of the
 17 data from the provider. But Google Maps forbids such caching.

18 566. Getify has observed that, on the one hand, Google's prohibition against using map
 19 caching to direct competitors of Google Maps in each of the Digital Maps API, Digital Places
 20 API, and Digital Routes API Markets that use Google's Maps APIs, Places APIs, and Routes
 21 APIs as inputs in their own businesses, while, on the other hand, Google Maps itself allows
 22 caching for its own products, is another tool used to unreasonably exclude the already dwindling
 23 competition to Google Maps in the Relevant Antitrust Products Markets.

24 567. And Getify has observed that Google's self-preferencing in connection with
 25 Google Maps caching has caused anticompetitive harm to Plaintiffs and the Class. For example,
 26 strangling out competition through, in part, self-preferencing on map caching, Google Maps
 27 better ensures that its customers must continue to call its APIs for every single request, even

1 within mere seconds in between multiple calls that are likely to retrieve the same data, so that
 2 Google can charge for those additional API calls. But allowing a customer, such as Getify, to
 3 cache digital-mapping APIs retrieved from Google Maps, for even just very brief periods of
 4 time, would allow customers to potentially reduce the costs risks to purchasing Google's Maps
 5 APIs, Places APIs, and Routes APIs. This is partially why permitting caching has been observed
 6 by Getify to be an industry standard. Moreover, by allowing caching, Google Maps would
 7 enable customers, such as Plaintiffs and the Class, to still provide digital-mapping data to users
 8 of their apps or websites, while Google Maps experiences a shutdown, which it has recently.

9 568. Getify notes that Google Maps does not even offer full Places APIs nor Routes
 10 APIs to retrieve all types of data that app or website developers would like to use and link on
 11 digital maps. For example, RestaurNote would like to retrieve more fulsome ranking,
 12 commentary, and review information about restaurants and use and link it with Google's Maps
 13 APIs. But much of this data is not available from Google's Places APIs. RestaurNote is not even
 14 permitted by Google Maps to get this information from RestaurNote's own users or from
 15 competitors' APIs or other sources and use and link that with data retrieved from Google's Maps
 16 APIs. Nor is RestaurNote permitted to use and link its own data about places details on a digital
 17 map created with Google's Maps APIs.

18 (iii) *Plaintiff Sprinter*

19 569. Plaintiff Sprinter is an e-commerce automotive parts shop located in Northeast
 20 Philadelphia. During the global Covid pandemic, Sprinter also began ordering personal
 21 protective equipment, such as masks, to distribute to frontline workers. It found that maps APIs,
 22 places APIs, and routes APIs (particularly routes APIs) are highly valuable in displaying digital-
 23 mapping information on its website, in order to help local customers find their business.

24 570. When Sprinter initially became aware of Google's high prices for its Places APIs
 25 and Routes APIs, it searched for providers as an alternative to or in combination with Google's
 26 Places APIs and Routes APIs. Sprinter found competing providers of places APIs and routes
 27 APIs that offered significantly cheaper prices, even for free, and of comparable quality, if not
 28

1 better.

2 571. Due to the negative tying, exclusive dealing, and other alleged anticompetitive
 3 actions herein, once Plaintiff Sprinter used any of Google's Maps APIs, Places APIs, or Routes
 4 APIs, Sprinter could not use any of competitors' maps APIs, places APIs, or routes APIs.

5 572. During the Class Period, Sprinter has reviewed, assessed, and searched for places
 6 APIs and routes APIs from competitors, including, without limitation, Mapbox, Mapquest,
 7 OpenStreetMaps, and Bing. Sprinter still wants to use places APIs from these competitors, in
 8 combination with Google's Routes APIs. The reason for the search for competitors' places APIs
 9 and routes APIs is because they are relatively cheaper than Google's Places APIs or Routes
 10 APIs, including some that were approximately 60% cheaper and even free, and Sprinter believes
 11 that competitors' places APIs or routes APIs offer extra features or at the least, have comparable
 12 quality, if not better.

13 573. Due to the Terms of Service and other anticompetitive actions alleged herein,
 14 during the Class Period, Sprinter was unable to use any of Mapbox, Mapquest, OpenStreetMaps,
 15 or Bing's (among others) places APIs, in conjunction with any of Google's Maps APIs or Routes
 16 APIs. Once Sprinter started using any of Google's Maps APIs, Places APIs, or Routes APIs,
 17 Sprinter must have foregone using any of competitors' preferred places APIs.

18 574. During the Class Period, Sprinter was forced to continue purchasing or expending
 19 monetary credits on using unwanted Google's Places APIs.

20 575. But for the anticompetitive conduct alleged herein, including, without limitation,
 21 negative tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative,
 22 attempted monopolization), Sprinter would have preferred to explore and use competitors'
 23 places APIs, in conjunction with Google's Routes APIs.

24 576. There is sufficient demand from Sprinter to purchase or expend monetary credits
 25 for Google's Maps APIs and Routes APIs and competitors' places APIs—even to use the Places
 26 APIs for free from competitors other than Google—to link and use them together on one app,
 27 one webpage, one website, or one other type of digital display or screen for Sprinter's customers

1 or potential customers to view on one app, one webpage, one website, or one other type of digital
 2 display or screen.

3 577. But Defendants' anticompetitive schemes alleged herein render it infeasible from
 4 an economic perspective—and indeed, forbidden from a contractual perspective—for Sprinter
 5 to purchase or expend monetary credits for Google's Maps APIs and Routes APIs and use and
 6 link a competitors' places APIs in such fashion. Indeed, Sprinter has been forced to use only
 7 Google's Maps APIs, Places APIs, and Routes APIs—to the exclusion of competitors' maps
 8 APIs, places APIs, or routes APIs.

9 578. It would not make economic nor practical sense for Sprinter to create one digital
 10 map using only Google's Maps APIs and Routes APIs and then create an entirely separate and
 11 unlinked digital map using only competitors' places APIs. Users would be confused, frustrated,
 12 and abandon the app if they were made to navigate between two entirely different and unlinked
 13 digital-map experiences. It does not make economic nor practical sense for Sprinter to devote
 14 money, monetary credits, time, effort, or digital real estate to (i) use on one app, one webpage,
 15 one website, or one other type of digital display or screen for Sprinter's customers or potential
 16 customers to view a digital map created from purchased or monetary-credit-expended Maps
 17 APIs and Routes APIs from Google Maps, and then also (ii) use places APIs from competitors
 18 on an entirely separate and unlinked app, webpage, website, or other separate and unlinked type
 19 of digital display or screen for Sprinter's customers or potential customers to view.

20 579. Sprinter alleges that the ability to use and link maps APIs, places APIs, or routes
 21 APIs together on one digital screen or display on one app, webpage, or website is critical to the
 22 user's experience and to the likelihood of the user's patronage of Sprinter. If the user is required
 23 to view the maps APIs, places APIs, or routes APIs on entirely separate and unlinked screens,
 24 that user would simply abandon the app, webpage, or website or stop interacting with it
 25 altogether. Routing users to an entirely separate and unlinked app, webpage, website, or digital
 26 screen is not a reasonable substitute. The competitive alternative and best use for all
 27 stakeholders—Plaintiffs and Class members, indirect users, and competition generally—is for
 28

1 Sprinter to have Google's Maps APIs and Routes APIs and competitors' places APIs linked on
 2 one digital screen on one app, webpage, or website.

3 580. Sprinter alleges that during the Class Period, once it has used one of Google's
 4 Maps APIs or Routes APIs, it has been locked into Google Maps' ecosystem and cannot unwind
 5 or disband the digital mapping created without substantial cost, in terms of money, time, and
 6 effort, as well as the opportunity cost of having mapping unavailable to the public, that renders
 7 the process infeasible, in order to create a new digital map based totally on non-Google Maps'
 8 APIs. It does not make financial sense nor is worth the time, effort, and risk of shutting down
 9 or disbanding the app, webpage, or website to switch to an entirely new digital map based totally
 10 on non-Google Maps' APIs. Part of the risk is the loss of patronage while the app, webpage, or
 11 website is being rebuilt.

12 581. Sprinter knew that it could not violate the TOS because it was dealing with
 13 Google. Violations of the TOS are under Google Maps' watchful eye. Under the TOS Section
 14 1.4, customers must provide to Google Maps each authorized domain and app that uses any of
 15 Google's Maps APIs, Places APIs, or Routes APIs. Under the TOS Section 3.2.2(c), at Google's
 16 request, customers must submit their domains, apps, and projects to Google for review to ensure
 17 compliance. And under the TOS Section 5.1, Google may suspend Google's Maps APIs, Places
 18 APIs, and Routes APIs without prior notice if customers breach the TOS.

19 582. Sprinter's Director recalls having expended and depleted monetary credits and
 20 having spent money on each of Google's Maps APIs, Places APIs, and Routes APIs during the
 21 Class Period. Several credit cards for Sprinter were associated with its Google Maps account
 22 through the GCP, and Sprinter's Director recalls having spent money on each of Google's Maps
 23 APIs, Places APIs, and Routes APIs, in addition to the monetary credits that were expended and
 24 depleted. Although the Director remembers having spent money on each of Google's Maps
 25 APIs, Places APIs, and Routes APIs, the GCP account was closed and the credit cards used for
 26 Sprinter were cancelled. Sprinter was able to find one record reflecting a charge of \$5.74 in
 27 early February 2020 for a Maps API, for which it is unclear whether this was money charged to
 28

1 Sprinter in addition to the depletion of monetary credits. But Sprinter was unable to access and
 2 review past statements from Google's Maps APIs, Places APIs, and Routes APIs and the usage
 3 of monetary credits and additional monetary spending. The Director's memory of Sprinter
 4 having spent money on each of Maps APIs, Places APIs, and Routes APIs during the Class
 5 Period is based, in part, on the memory of the staggering prices and charges for each, which was
 6 the catalyst for Sprinter's Director to have researched competitors' offerings and identify
 7 preferred competitors, and Sprinter's Director's memory of the negative tying terms that forbade
 8 the product linking, despite the Director's ultimate identification of competitors that he
 9 preferred. Sprinter's records will be available in discovery.

10 583. The monetary credits had value to Sprinter, which Sprinter received in
 11 consideration for providing Defendants with valuable data about its use and that of its app or
 12 website visitors when using Google's Maps APIs, Places APIs, and Routes APIs. Such data
 13 provided value to Defendants in several ways, including, without limitation, through helping
 14 Defendants monetize the data or through advertising efforts.

15 584. Sprinter was forced to remove digital mapping from its app and website during
 16 the Class Period.

17 585. Even if Sprinter is not a representative of the negative tying claim, it is still a
 18 representative of the exclusive dealing claim and the Section 2 claims plead in totality. In
 19 totality, the anticompetitive actions have resulted in anticompetitive effects and harm in all of
 20 the Digital Maps API Market, Digital Places API Market, and Digital Routes API Market,
 21 including, without limitation, anticompetitive price increases and reductions in monetary
 22 credits, quality, and innovation in each of the markets, but for the anticompetitive conduct.
 23 Sprinter has suffered anticompetitive harm and damages.

24 586. The anticompetitive actions in totality serve to lock-in Sprinter, Plaintiffs, and the
 25 Class into the Google Maps ecosystem. They serve to exclude competitors in any of the Digital
 26 Maps API Market, Digital Places API Market, and Digital Routes API Market. By using the
 27 anticompetitive schemes to disable Plaintiffs and Class members from purchasing places APIs

1 and routes APIs from competitors, Google forces those Plaintiffs and Class members to purchase
 2 Places APIs and Routes APIs from Google Maps and further entrench those Plaintiffs and Class
 3 members into the Google Maps ecosystem, making them more reliant on Google's Maps APIs
 4 as well. This helps further exclude competition on the merits in each of the Digital Maps API
 5 Market, Digital Places API Market, and Digital Routes API Market, foreclosing competitors
 6 from customers and scale to advance technology and benefit from the flywheel of innovation,
 7 and further erecting barriers to entry. This results in if Plaintiffs and Class members purchased
 8 any of Google's Maps APIs, then they still have been victims of anticompetitive harm and
 9 damages from Google's monopolization through having paid prices or expended monetary
 10 credits for them, that would have been cheaper, but for the anticompetitive actions that strangled
 11 out competition. The anticompetitive actions in totality are alleged to enhance and at the least,
 12 maintain Google's monopoly power in the Digital Maps API Market itself as well.

13 587. The alleged anticompetitive actions in totality forecloses competition on the
 14 merits in the Digital Maps APIs Market, Digital Places APIs Market, and Digital Routes APIs
 15 Market.

16 588. The anticompetitive actions in totality are alleged to have caused consolidation in
 17 the Digital Maps API Market, Digital Places API Market, and Digital Routes API Market, and
 18 this has enabled Google Maps to charge alleged supracompetitive prices, degrade quality and
 19 innovation, reduce output, supply, and variety, exclude competition, and elevate barriers to
 20 entry, resulting in supracompetitive prices and degraded quality in each of Google's Maps APIs,
 21 Places APIs, and Routes APIs, but for the alleged anticompetitive conduct.

22 589. The consistencies in each Plaintiffs' experiences further reinforce the importance
 23 of the class action mechanism in this Action.

24 **V. DEFENDANTS' ACTIONS AFFECTED INTERSTATE COMMERCE**

25 590. Defendants engage in interstate commerce and activities substantially affecting
 26 interstate commerce, including, without limitation, providing products or tools, such as Google
 27 Maps, Waze, Gmail, YouTube, Android OS, and search, to app and website developers, other
 28

1 users, and consumers throughout the U.S.

2 591. Defendants' activities as alleged herein were within the flow of and substantially
 3 affected interstate commerce. Defendants sell Google's Maps APIs, Places APIs, and Routes
 4 APIs across state lines throughout the U.S.

5 592. Plaintiffs and Class members use Google's Maps APIs, Places APIs, and Routes
 6 APIs to provide products and services to their customers throughout the U.S.

7 593. The adverse effects on competition in the relevant antitrust products markets of
 8 the Digital Maps API Market, the Digital Places API Market, and the Digital Routes API Market
 9 as a result of the alleged anticompetitive schemes—negative tying, exclusive dealing, self-
 10 preferencing, and monopolization (or in the alternative, attempted monopolization)—have been
 11 more than substantial throughout the U.S.

12 594. For context, Defendants do not publicly disclose specific financial metrics for
 13 Google Maps. But Defendants and analysts have reported throughout the Class Period that
 14 Google Maps has more than a billion users per month. Experienced analysts have estimated that
 15 Google Maps' annual revenues as of late-2019 have ranged between \$2.95 billion to \$4.3 billion,
 16 projections for 2020 annual revenue to have been approximately \$4.8 billion, projections during
 17 the Class Period for annual revenue to reach approximately \$9 billion, and projections for 2023
 18 annual revenue of approximately \$11 billion. As a standalone business, Google Maps has been
 19 estimated by analysts and a bank to have ranged between approximately \$50 billion and \$61.5
 20 billion during the Class Period. A material component of these annual revenues is alleged to
 21 have been generated through the anticompetitive practices alleged herein.

22 595. A substantial volume of commerce throughout the U.S. is alleged to have been
 23 adversely affected by the alleged anticompetitive schemes.

24 596. The alleged anticompetitive schemes have caused a pernicious effect on
 25 commerce throughout the U.S.

26 **VI. CLASS ACTION ALLEGATIONS**

27 597. Plaintiffs bring this action on behalf of themselves and as a class action under

1 Federal Rules of Civil Procedure 23(a), 23(b)(1), 23(b)(2), and 23(b)(3), on behalf of the
 2 following class (“Class”):

3 From April 13, 2018, through the date of adjudication or resolution of this action
 4 (“Class Period”), all entities or persons in the United States who are (i) direct
 5 purchasers of or (ii) direct expenders of monetary credits for any of Google’s Maps
 6 APIs, Places APIs, or Routes APIs.

7 598. Specifically excluded from the Class are the following: Defendants; officers,
 8 directors, or employees of any Defendant; any entity in which any Defendant has a controlling
 9 interest; any affiliate, legal representative, heir, or assign of any Defendant; any person acting
 10 on their behalf; any judicial officer presiding over this action and his/her immediate family
 11 members; the judicial staff; and any juror assigned to this action.

12 599. **Ascertainability:** The Class is readily ascertainable, and the records for them
 13 should exist, including, without limitation, in Defendants and Google’s own records and
 14 transaction data.

15 600. **Numerosity:** Due to the nature of the trade and commerce involved, there are
 16 hundreds of thousands, if not millions, of geographically dispersed Class members, the exact
 17 number and their identities being known to Defendants. Individual joinder in this action is
 18 impracticable.

19 601. **Typicality:** Plaintiffs’ claims are typical of the Class members’ claims. The
 20 factual and legal bases of Defendants’ liability are the same and resulted in injury to Plaintiffs
 21 and Class members. Plaintiffs and Class members sustained damages arising out of Defendants’
 22 common course of conduct in violation of the laws alleged herein. Each Class member’s
 23 damages and injuries were directly caused by Defendants’ wrongful conduct.

24 602. **Commonality:** There are questions of fact and law common to the Class
 25 members, including the following, without limitation:

26 a. Whether there are relevant antitrust products markets that include each of the
 27 Digital Maps API Market, the Digital Places API Market, and the Digital
 28 Routes API Market;

- 1 b. Whether Defendants or Google Maps have monopoly power in the relevant
- 2 products markets;
- 3 c. Whether Defendants or Google Maps have sufficient market or economic
- 4 power in the relevant products markets;
- 5 d. Whether maps APIs, places APIs, or routes APIs are separate products;
- 6 e. Whether Defendants or Google Maps engaged in unlawful negative tying;
- 7 f. Whether Defendants or Google Maps engaged in unlawful exclusive dealing;
- 8 g. Whether Defendants or Google Maps engaged in unlawful self-preferencing;
- 9 h. Whether Defendants or Google Maps engaged in unlawful monopolization;
- 10 i. Whether Defendants or Google Maps engaged in unlawful attempted
- 11 monopolization;
- 12 j. Whether the *per se* test applies;
- 13 k. Whether a quick-look test applies;
- 14 l. Whether a rule-of-reason test applies;
- 15 m. Whether procompetitive effects outweighed anticompetitive effects and even
- 16 if so, whether the procompetitive effects were narrowly tailored for the
- 17 objectives;
- 18 n. Whether the unlawful conduct harmed competition;
- 19 o. Whether Plaintiffs and Class members suffered antitrust injury;
- 20 p. Whether Defendants or Google Maps violated state laws;
- 21 q. Whether Plaintiffs and Class members suffered damages of any kind;
- 22 r. Whether Plaintiffs and Class members are entitled to declaratory or injunctive
- 23 relief and to their attorneys' fees, costs, and expenses; and
- 24 s. The appropriate Class-wide damages measure.

25 603. **Adequacy:** Plaintiffs will fairly and adequately protect the Class members'

26 interests. Plaintiffs' interests are aligned with and not antagonistic to or conflicting with those

27 of the Class members. Plaintiffs have retained counsel competent and experienced in

1 prosecuting class actions and antitrust litigation to represent themselves and the Class.

2 604. **Predominance:** Questions of fact or law common to the Class members
 3 predominate over any questions affecting only individual Class members.

4 605. **Superiority:** A class action is superior to other available methods for the fair and
 5 efficient adjudication of this controversy. The prosecution of separate actions by individual
 6 Class members would impose heavy burdens on the courts and Defendants and would create a
 7 risk of inconsistent or varying adjudications of the questions of fact and law common to the
 8 Class. On the other hand, a class action would achieve substantial economies of effort and
 9 expense and would assure uniformity of decisions as to persons similarly situated without
 10 sacrificing procedural fairness or bringing about other undesirable results. Absent a class action,
 11 it would not be feasible for the vast majority of Class members to seek redress for the violations
 12 of law alleged herein.

13 606. **Injunctive and declaratory relief:** By way of their conduct described in the
 14 complaint, Defendants have acted on grounds that apply generally to the proposed Class.
 15 Accordingly, injunctive relief or corresponding declaratory relief is appropriate with respect to
 16 the Class as a whole.

17 607. Addressing any potential, speculative windfall for claimants at this nascent stage
 18 is inapplicable and premature. For example, a recovery or settlement involved for those Class
 19 members who only expended monetary credits on Google’s Maps APIs, Places APIs, or Routes
 20 APIs (who did not spend money above the monetary credits on any of Google’s Maps APIs,
 21 Places APIs, and Routes APIs) could seek redress only in terms of monetary credits (absent facts
 22 learned otherwise in discovery). And those Class members who only expended monetary credits
 23 on Google’s Maps APIs, Places APIs, or Routes APIs (who did not spend money above the
 24 monetary credits on any of Google’s Maps APIs, Places APIs, and Routes APIs) nevertheless
 25 have standing to pursue declarative and injunctive relief on behalf of the Class.

26 **VII. CALIFORNIA LAW APPLIES TO THE ENTIRE CLASS**

27 608. California’s substantive laws apply to every Class member, regardless of where
 28

1 in the U.S. the Class member resides. The Terms of Service explicitly state that California law
 2 will govern all disputes arising out of or relating to the Terms of Service, regardless of conflict
 3 of laws rules. By choosing California law for the resolution of disputes covered by its Terms of
 4 Service, Defendants concede that it is appropriate for this Court to apply California law to the
 5 instant dispute.

6 609. Further, California's substantive laws may be constitutionally applied to the
 7 claims of Plaintiffs and Class members under the Due Process Clause, *see* U.S. CONST. amend.
 8 XIV, § 1, and the Full Faith and Credit Clause, *see* U.S. CONST. art. IV, § 1, of the U.S.
 9 Constitution. California has significant contact or significant aggregation of contacts with the
 10 claims asserted by Plaintiffs and Class members, thereby creating state interests that ensure that
 11 the choice of California state law is not arbitrary or unfair. Defendants' decisions to reside in
 12 California and avail themselves of California's laws and to engage in the challenged conduct
 13 from and emanating out of California render the application of California law to the claims
 14 herein constitutionally permissible. The application of California laws to the Class is also
 15 appropriate under California's choice of law rules because California has significant contacts
 16 with the claims of Plaintiffs and Class members, and California has the greatest interest in
 17 applying its laws here.

VIII. TOLLING OF THE STATUTE OF LIMITATIONS

19 610. The statutes of limitations did not begin to run because Plaintiffs did not and could
 20 not discover their claims through the exercise of reasonable diligence prior to the initiation of
 21 Plaintiffs and their counsel's investigation within the statute of limitations.

22 611. Plaintiffs had no knowledge of Defendants' anticompetitive conduct or facts
 23 sufficient to place them on inquiry notice of the claims asserted herein prior to the initiation of
 24 Plaintiffs and their counsel's investigation within the statute of limitations.

25 612. As described herein, Plaintiffs and Class members suffered economic loss as a
 26 result of Defendants' negative tying, exclusive dealing, self-preferencing, and monopolization
 27 (or in the alternative, attempted monopolization) in the relevant antitrust products markets of

1 the Digital Maps API Market, the Digital Places API Market, and the Digital Routes API
 2 Market. Other than dealing directly with Google Maps when using Google's Maps API, Places
 3 APIs, and Routes APIs, Plaintiffs had no direct contact nor interaction with Defendants and had
 4 no means from which they could have discovered Defendants' wrongful conduct.

5 613. Plaintiffs first learned about information in the public domain sufficient to put it
 6 on notice of Defendants' alleged anticompetitive conduct when the House Antitrust Report was
 7 released around October 6, 2020.

8 614. Before then, it was reasonable for Plaintiffs not to have suspected that Defendants
 9 were engaging in any unlawful anticompetitive behavior.

10 615. Plaintiffs allege a continuing course of unlawful conduct by Defendants, including
 11 conduct within the applicable limitations periods. That conduct has inflicted continuing and
 12 accumulating harm within the applicable statutes of limitations.

13 616. For these reasons, the statutes of limitations applicable to Plaintiffs and Class
 14 members' claims have been tolled with respect to the claims asserted herein.

15 617. Additionally and alternatively, application of the fraudulent-concealment doctrine
 16 tolled the statutes of limitations on Plaintiffs and Class members' claims.

17 618. Plaintiffs had no knowledge of Defendants' negative tying, exclusive dealing,
 18 self-preferencing, and monopolization (or in the alternative, attempted monopolization) in the
 19 relevant antitrust products markets of the Digital Maps API Market, the Digital Places API
 20 Market, and the Digital Routes API Market or of facts sufficient to place them on inquiry notice
 21 of their claims, prior to the initiation of Plaintiffs and their counsel's investigation within the
 22 statute of limitations. Plaintiffs first learned about information in the public domain sufficient
 23 to put them on notice of Defendants' alleged anticompetitive conduct no earlier than when the
 24 House Antitrust Report was released around October 6, 2020.

25 619. Defendants concealed their illicit conduct by failing to disclose their negative
 26 tying, exclusive dealing, self-preferencing, and monopolization (or in the alternative, attempted
 27 monopolization) in the relevant antitrust products markets of the Digital Maps API Market, the

1 Digital Places API Market, and the Digital Routes API Market.

2 620. Because Defendants' antitrust violations were self-concealing and affirmatively
 3 concealed by Defendants, Plaintiffs had no knowledge of Defendants' antitrust violations or of
 4 any facts or information that would have caused a reasonably diligent person to suspect
 5 Defendants of having wrongfully conducted negative tying, exclusive dealing, self-
 6 preferencing, and monopolization (or in the alternative, attempted monopolization) in the
 7 relevant antitrust products markets of the Digital Maps API Market, the Digital Places API
 8 Market, and the Digital Routes API Market, prior to the initiation of Plaintiffs and their
 9 counsel's investigation within the statute of limitations.

10 621. Therefore, by operation of Defendants' fraudulent concealment, the statutes of
 11 limitations applicable to Plaintiffs and Class members' claims were tolled throughout the Class
 12 Period.

13 **IX. CAUSES OF ACTION**

14 **COUNT ONE: Tying in Violation of Sherman Act Sections 1 & 3**
 15 **(15 U.S.C. §§ 1, 3)**
(Against All Defendants)

16 622. Plaintiffs hereby incorporate by reference the allegations above as if fully set forth
 17 herein.

18 623. Defendants' conduct violates Sections 1 and 3 of the Sherman Act, which prohibit
 19 every "contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade
 20 or commerce," whether foreign or domestic. 15 U.S.C. §§ 1, 3.

21 624. Defendants through contractual arrangements have imposed unlawful negative
 22 tying, whereby Google's products in the Digital Maps API Market are the tying products, and
 23 the negatively tied products are Google's products in the Digital Places API Market and Digital
 24 Routes API Market, to the detriment of Plaintiffs and the Class.

25 625. Defendants' negative tying practices are a *per se* violation of antitrust laws.

26 626. In the alternative, Defendants' negative tying violates the "quick look" and "rule
 27 of reason" standards because Defendants' negative tying harmed competition in the Digital
 28 Maps API Market, Digital Places API Market, and Digital Routes API Market. The negative

1 tying provides no procompetitive benefits and, even if it did, the anticompetitive effects
2 substantially outweigh any asserted procompetitive effects and/or are not the least restrictive
3 method to achieve any such procompetitive benefits. The negative tying serves no legitimate or
4 pro-competitive purpose that could justify the anti-competitive effects. The negative tying
5 unreasonably restrains competition. And the restraints described herein are substantially more
6 restrictive than necessary to achieve any procompetitive ends.

7 627. Defendants' conduct affects interstate commerce.

8 628. Defendants' conduct has substantial anticompetitive effects, including, without
9 limitation, stabilized or increased prices (and reduced value of monetary credits), decreased
10 output or variety, and diminished quality or innovation.

11 629. As a direct and proximate result of the negative tying, Plaintiffs and Class
12 members have suffered and continue to suffer antitrust injury, harm, and damages to their
13 businesses and property.

14 630. Plaintiffs and Class members' injuries are of the type that the U.S. federal antitrust
15 laws were designed to prevent and flow directly from Defendants' unlawful, anticompetitive
16 conduct.

17 631. On behalf of themselves and Class members, Plaintiffs seek injunctive relief
18 barring Defendants from engaging in the anticompetitive conduct alleged herein, under Clayton
19 Act Section 16, 15 U.S.C. § 26. The violations set forth above and the effects thereof are
20 continuing and will continue and cause Plaintiffs and Class members irreparable injury, unless
21 injunctive relief is granted.

22 632. Plaintiffs and Class members have suffered and continue to suffer monetary
23 damages as a direct and proximate result of Defendants' illegal agreements, contracts,
24 combinations, trusts, and/or conspiracy. They have thus been and continue to be injured and
25 damaged in their respective businesses and property in an amount to be determined according
26 to proof at trial and are entitled to recover threefold the damages sustained, pursuant to Clayton
27 Act Section 4, 15 U.S.C. § 15. Alternatively, Plaintiffs and Class members are entitled to a
28

1 judgment of disgorgement against Defendants in an amount to be determined at trial.

2

3 **COUNT TWO: Tying in Violation of Clayton Act Section 3**
(15 U.S.C. § 14)
(Against All Defendants)

4 633. Plaintiffs hereby incorporate by reference the allegations above as if fully set forth
5 herein.

6 634. Digital Maps APIs, Digital Places APIs, and Digital Routs APIs are products.
7 Plaintiffs allege that these APIs are treated more like products than code. Indeed, Google itself
8 has recognized Maps APIs, Places APIs, and Routes APIs as “Products” on its websites and
9 webpages during the Class Period.

10 635. Defendants through contractual arrangements have imposed unlawful negative
11 tying, whereby Google’s products in the Digital Maps API Market are the tying products, and
12 the negatively tied products are Google’s products in the Digital Places API Market and Digital
13 Routes API Market, to the detriment of Plaintiffs and the Class.

14 636. The effects of Defendants’ negative tying are to “substantially lessen
15 competition” or “tend to create a monopoly[.]” 15 U.S.C. § 14.

16 637. Defendants’ conduct affects interstate commerce.

17 638. Defendants’ conduct has substantial anticompetitive effects, including, without
18 limitation, stabilized or increased prices (and reduced value of monetary credits), decreased
19 output or variety, and diminished quality or innovation.

20 639. As a direct and proximate result of the negative tying, Plaintiffs and Class
21 members have suffered and continue to suffer antitrust injury, harm, and damages to their
22 businesses and property.

23 640. Plaintiffs and Class members’ injuries are of the type that the U.S. federal antitrust
24 laws were designed to prevent and flow directly from Defendants’ unlawful, anticompetitive
25 conduct.

26 641. On behalf of themselves and Class members, Plaintiffs seek injunctive relief
27 barring Defendants from engaging in the anticompetitive conduct alleged herein, under Clayton
28

1 Act Section 16, 15 U.S.C. § 26. The violations set forth above and the effects thereof are
 2 continuing and will continue and cause Plaintiffs and Class members irreparable injury, unless
 3 injunctive relief is granted.

4 642. Plaintiffs and Class members have suffered and continue to suffer monetary
 5 damages as a direct and proximate result of Defendants' illegal agreements, contracts,
 6 combinations, trusts, and/or conspiracy. They have thus been and continue to be injured and
 7 damaged in their respective businesses and property in an amount to be determined according
 8 to proof at trial and are entitled to recover threefold the damages sustained, pursuant to Clayton
 9 Act Section 4, 15 U.S.C. § 15. Alternatively, Plaintiffs and Class members are entitled to a
 10 judgment of disgorgement against Defendants in an amount to be determined at trial.

11 **COUNT THREE: Exclusive Dealing in Violation of Sherman Act Sections 1 & 3**
 12 **(15 U.S.C. §§ 1, 3)**
(Against All Defendants)

13 643. Plaintiffs hereby incorporate by reference the allegations above as if fully set forth
 14 herein.

15 644. Defendants' conduct violates Sections 1 and 3 of the Sherman Act, which prohibit
 16 every "contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade
 17 or commerce," whether foreign or domestic. 15 U.S.C. §§ 1, 3.

18 645. Defendants through contractual arrangements have imposed unlawful exclusive
 19 dealing in the Digital Maps API Market, Digital Places API Market, and Digital Routes API
 20 Market, to the detriment of Plaintiffs and the Class. The exclusive dealing has substantially
 21 foreclosed competition: Defendants' exclusive dealing has resulted in foreclosure of a
 22 substantial share of each of the Digital Maps API Market, Digital Places API Market, and Digital
 23 Routes API Market.

24 646. Defendants' exclusive dealing harmed competition in the Digital Maps API
 25 market, Digital Places API market, and Digital Routes API market. The exclusive dealing
 26 provides no procompetitive benefits and, even if it did, the anticompetitive effects substantially
 27 outweigh any asserted procompetitive effects and/or are not the least restrictive method to

1 achieve any such procompetitive benefits. The exclusive dealing serves no legitimate or pro-
2 competitive purpose that could justify the anti-competitive effects. The exclusive dealing
3 unreasonably restrains competition. And the restraints described herein are substantially more
4 restrictive than necessary to achieve any procompetitive ends.

5 647. Defendants' conduct affects interstate commerce.

6 648. Defendants' conduct has substantial anticompetitive effects, including, without
7 limitation, stabilized or increased prices (and reduced value of monetary credits), decreased
8 output or variety, and diminished quality or innovation.

9 649. As a direct and proximate result of the exclusive dealing, Plaintiffs and Class
10 members have suffered and continue to suffer antitrust injury, harm, and damages to their
11 businesses and property.

12 650. Plaintiffs and Class members' injuries are of the type that the U.S. federal antitrust
13 laws were designed to prevent and flow directly from Defendants' unlawful, anticompetitive
14 conduct.

15 651. On behalf of themselves and Class members, Plaintiffs seek injunctive relief
16 barring Defendants from engaging in the anticompetitive conduct alleged herein, under Clayton
17 Act Section 16, 15 U.S.C. § 26. The violations set forth above and the effects thereof are
18 continuing and will continue and cause Plaintiffs and Class members irreparable injury, unless
19 injunctive relief is granted.

20 652. Plaintiffs and Class members have suffered and continue to suffer monetary
21 damages as a direct and proximate result of Defendants' illegal agreements, contracts,
22 combinations, trusts, and/or conspiracy. They have thus been and continue to be injured and
23 damaged in their respective businesses and property in an amount to be determined according
24 to proof at trial and are entitled to recover threefold the damages sustained, pursuant to Clayton
25 Act Section 4, 15 U.S.C. § 15. Alternatively, Plaintiffs and Class members are entitled to a
26 judgment of disgorgement against Defendants in an amount to be determined at trial.

**COUNT FOUR: Exclusive Dealing in Violation of Clayton Act Section 3
(15 U.S.C. § 14)
(Against All Defendants)**

653. Plaintiffs hereby incorporate by reference the allegations above as if fully set forth herein.

654. Maps APIs, Digital Places APIs, and Digital Routes APIs are products. Plaintiffs allege that these APIs are treated more like products than code. Indeed, Google itself has recognized Maps APIs, Places APIs, and Routes APIs as “Products” on its websites and webpages during the Class Period.

655. Defendants through contractual arrangements have imposed unlawful exclusive dealing in the Digital Maps API Market, Digital Places API Market, and Digital Routes API Market, to the detriment of Plaintiffs and the Class.

656. The effects of Defendants' exclusive dealing are to "substantially lessen competition" or "tend to create a monopoly[.]" 15 U.S.C. § 14.

657. Defendants' conduct affects interstate commerce.

658. Defendants' conduct has substantial anticompetitive effects, including, without limitation, stabilized or increased prices (and reduced value of monetary credits), decreased output or variety, and diminished quality or innovation.

659. As a direct and proximate result of the negative tying, Plaintiffs and Class members have suffered and continue to suffer antitrust injury, harm, and damages to their businesses and property.

660. Plaintiffs and Class members' injuries are of the type that the U.S. federal antitrust laws were designed to prevent and flow directly from Defendants' unlawful, anticompetitive conduct.

661. On behalf of themselves and Class members, Plaintiffs seek injunctive relief barring Defendants from engaging in the anticompetitive conduct alleged herein, under Clayton Act Section 16, 15 U.S.C. § 26. The violations set forth above and the effects thereof are continuing and will continue and cause Plaintiffs and Class members irreparable injury, unless

1 injunctive relief is granted.

2 662. Plaintiffs and Class members have suffered and continue to suffer monetary
 3 damages as a direct and proximate result of Defendants' illegal agreements, contracts,
 4 combinations, trusts, and/or conspiracy. They have thus been and continue to be injured and
 5 damaged in their respective businesses and property in an amount to be determined according
 6 to proof at trial and are entitled to recover threefold the damages sustained, pursuant to Clayton
 7 Act Section 4, 15 U.S.C. § 15. Alternatively, Plaintiffs and Class members are entitled to a
 8 judgment of disgorgement against Defendants in an amount to be determined at trial.

9 **COUNT FIVE: Monopolization in Violation of Sherman Act Section 2**
 10 **(15 U.S.C. § 2)**
(Against All Defendants)

11 663. Plaintiffs hereby incorporate by reference the allegations above as if fully set forth
 12 herein.

13 664. Defendants' conduct violates Sherman Act Section 2, which prohibits the
 14 "monopoliz[ation] [of] any part of the trade or commerce among the several States, or with
 15 foreign nations[.]" 15 U.S.C. § 2.

16 665. The Digital Maps API Market, Digital Places API Market, and Digital Routes API
 17 Market are valid Relevant Antitrust Products Markets.

18 666. Google Maps possesses monopoly power in each of the Digital Maps API Market,
 19 Digital Places API Market, and Digital Routes API Market.

20 667. Defendants have engaged in negative tying, exclusive dealing, and self-
 21 preferencing, in totality, in order to unlawfully acquire and maintain Google Maps' monopoly
 22 power in the Digital Maps API Market, Digital Places API Market, and Digital Routes API
 23 Market.

24 668. Defendants' alleged anticompetitive actions, in totality, have unlawfully excluded
 25 competition and competitors in the Relevant Antitrust Products Markets and have erected and
 26 raised barriers to entry. The alleged anticompetitive actions, in totality, was designed to and has
 27 lessened competition, increased prices (and reduced value of monetary credits), reduced

1 availability, reduced output, reduced diversity, reduced quality, reduced innovation, and
 2 otherwise unfairly advantaged and aggrandized Google Maps in the Relevant Antitrust Products
 3 Markets, separate and apart from having superior products, business acumen, or historic
 4 accident.

5 669. Defendants' alleged anticompetitive actions, in totality, harmed competition in
 6 the Digital Maps API Market, Digital Places API Market, and Digital Routes API Market. The
 7 alleged anticompetitive activity provides no procompetitive benefits and, even if it did, the
 8 anticompetitive effects substantially outweigh any asserted procompetitive effects and/or are
 9 not the least restrictive method to achieve any such procompetitive benefits. The alleged
 10 anticompetitive activity serves no legitimate or pro-competitive purpose that could justify the
 11 anti-competitive effects. The alleged anticompetitive activity unreasonably restrains
 12 competition. And the restraints described herein are substantially more restrictive than necessary
 13 to achieve any procompetitive ends.

14 670. Defendants' conduct affects interstate commerce.

15 671. Defendants' conduct has substantial anticompetitive effects, including, without
 16 limitation, stabilized or increased prices (and reduced value of monetary credits), decreased
 17 output or variety, and diminished quality or innovation.

18 672. As a direct and proximate result of the alleged anticompetitive activity, Plaintiffs
 19 and Class members have suffered and continue to suffer antitrust injury, harm, and damages to
 20 their businesses and property.

21 673. Plaintiffs and Class members' injuries are of the type that the U.S. federal antitrust
 22 laws were designed to prevent and flow directly from Defendants' unlawful, anticompetitive
 23 conduct.

24 674. On behalf of themselves and Class members, Plaintiffs seek injunctive relief
 25 barring Defendants from engaging in the anticompetitive conduct alleged herein, under Clayton
 26 Act Section 16, 15 U.S.C. § 26. The violations set forth above and the effects thereof are
 27 continuing and will continue and cause Plaintiffs and Class members irreparable injury, unless
 28

1 injunctive relief is granted.

2 675. Plaintiffs and Class members have suffered and continue to suffer monetary
 3 damages as a direct and proximate result of Defendants' illegal anticompetitive conduct. They
 4 have thus been and continue to be injured and damaged in their respective businesses and
 5 property in an amount to be determined according to proof at trial and are entitled to recover
 6 threefold the damages sustained, pursuant to Clayton Act Section 4, 15 U.S.C. § 15.
 7 Alternatively, Plaintiffs and Class members are entitled to a judgment of disgorgement against
 8 Defendants in an amount to be determined at trial.

9 **COUNT SIX: Attempted Monopolization in Violation of Sherman Act Section 2**
 10 **(15 U.S.C. § 2)**
(Against All Defendants)

11 676. Plaintiffs hereby incorporate by reference the allegations above as if fully set forth
 12 herein.

13 677. Defendants' conduct violates Sherman Act Section 2, which prohibits the
 14 "attempt to monopolize . . . any part of the trade or commerce among the several States, or with
 15 foreign nations[.]" 15 U.S.C. § 2.

16 678. The Digital Maps API Market, Digital Places API Market, and Digital Routes API
 17 Market are valid Relevant Antitrust Products Markets.

18 679. Defendants possess specific intent to have Google Maps monopolize each of the
 19 Digital Maps API Market, Digital Places API Market, and Digital Routes API Market.

20 680. Defendants course of conduct has the dangerous probability of causing Google
 21 Maps to achieve monopoly power over the Relevant Antitrust Products Markets.

22 681. Defendants have engaged in negative tying, exclusive dealing, and self-
 23 preferencing, in totality, in order to unlawfully acquire Google Maps' monopoly power in the
 24 Digital Maps API Market, Digital Places API Market, and Digital Routes API Market.

25 682. Defendants' alleged anticompetitive actions, in totality, have unlawfully excluded
 26 competition and competitors in the Relevant Antitrust Products Markets and have erected and
 27 raised barriers to entry. The alleged anticompetitive actions, in totality, was designed to and has

1 lessened competition, increased prices (and reduced value of monetary credits), reduced
2 availability, reduced output, reduced diversity, reduced quality, reduced innovation, and
3 otherwise unfairly advantaged and aggrandized Google Maps in the Relevant Antitrust Products
4 Markets, separate and apart from having superior products, business acumen, or historic
5 accident.

6 683. Defendants' alleged anticompetitive actions, in totality, harmed competition in
7 the Digital Maps API Market, Digital Places API Market, and Digital Routes API Market. The
8 alleged anticompetitive activity provides no procompetitive benefits and, even if it did, the
9 anticompetitive effects substantially outweigh any asserted procompetitive effects and/or are
10 not the least restrictive method to achieve any such procompetitive benefits. The alleged
11 anticompetitive activity serves no legitimate or pro-competitive purpose that could justify the
12 anti-competitive effects. The alleged anticompetitive activity unreasonably restrains
13 competition. And the restraints described herein are substantially more restrictive than necessary
14 to achieve any procompetitive ends.

15 684. Through their course of conduct, Defendants have attempted to and are attempting
16 to have Google Maps monopolize the Relevant Antitrust Products Markets, in violation of
17 Sherman Act Section 2 (15 U.S.C. § 2).

18 685. Defendants' conduct affects interstate commerce.

19 686. Defendants' conduct has substantial anticompetitive effects, including, without
20 limitation, stabilized or increased prices (and reduced value of monetary credits), decreased
21 output or variety, and diminished quality or innovation.

22 687. As a direct and proximate result of the alleged anticompetitive activity, Plaintiffs
23 and Class members have suffered and continue to suffer antitrust injury, harm, and damages to
24 their businesses and property.

25 688. Plaintiffs and Class members' injuries are of the type that the U.S. federal antitrust
26 laws were designed to prevent and flow directly from Defendants' unlawful, anticompetitive
27 conduct.

1 689. On behalf of themselves and Class members, Plaintiffs seek injunctive relief
 2 barring Defendants from engaging in the anticompetitive conduct alleged herein, under Clayton
 3 Act Section 16, 15 U.S.C. § 26. The violations set forth above and the effects thereof are
 4 continuing and will continue and cause Plaintiffs and Class members irreparable injury, unless
 5 injunctive relief is granted.

6 690. Plaintiffs and Class members have suffered and continue to suffer monetary
 7 damages as a direct and proximate result of Defendants' illegal anticompetitive conduct. They
 8 have thus been and continue to be injured and damaged in their respective businesses and
 9 property in an amount to be determined according to proof at trial and are entitled to recover
 10 threefold the damages sustained, pursuant to Clayton Act Section 4, 15 U.S.C. § 15.
 11 Alternatively, Plaintiffs and Class members are entitled to a judgment of disgorgement against
 12 Defendants in an amount to be determined at trial.

13 **COUNT SEVEN: Violation of the California Unfair Competition Law**
 14 **(Cal. Bus. & Prof. Code. §§ 17200, *et seq.*)**
 14 **(Against All Defendants)**

15 691. Plaintiffs hereby incorporate by reference the allegations above as if fully set
 16 forth herein.

17 692. Defendants' conduct, acts, and practices, as described herein, violate
 18 California's Unfair Competition Law (Cal. Bus. & Prof. Code §§ 17200, *et seq.*), which
 19 prohibits any unlawful, unfair, or fraudulent business act or practice.

20 693. Plaintiffs may bring this Action under California's Unfair Competition Law
 21 because Defendants have offices and continuing operations in California, including, without
 22 limitation, Mountain View, California. Further, Google's California office is responsible for, in
 23 meaningful part, making or implementing decisions relating to Google's Maps APIs, Places
 24 APIs, and Routes APIs. And pursuant to the TOS, venue, personal jurisdiction, and applicable
 25 law is consented to in this District.

26 694. Defendants have engaged in unlawful negative tying, exclusive dealing, self-
 27 preferencing, and monopolization (or in the alternative and at the least, attempted
 28

1 monopolization), in connection with Google Maps' Maps APIs, Places APIs, and Routes APIs.

2 695. Plaintiffs and the Class have standing to bring this claim under California Unfair
3 Competition Law, as they have directly suffered injury in fact and lost money or property as a
4 result of Defendants' unlawful and unfair competition.

5 696. As a direct result of Defendants' conduct, acts, and practices, which unlawfully
6 disadvantage Plaintiffs and Class members, the asserted harm will continue unabated.

7 697. Plaintiffs and Class members are entitled to treble damages.

8 698. Plaintiffs and Class members also seek injunctive and declaratory relief.

9 **X. PRAYER FOR RELIEF**

10 WHEREFOR, on behalf of themselves and Class members, Plaintiffs respectfully request
11 the Court for a judgment at trial for the following:

12 a. Certification of this case as a class action on behalf of the Class pursuant to Fed.
13 R. Civ. P. 23(a), 23(b)(1), 23(b)(2), and 23(b)(3), an order that notice of this class action be given
14 to Class members, as provided by Fed. R. Civ. P. 23(c)(2), and appointment of Plaintiffs as class
15 representatives and its attorneys as class counsel;

16 b. An order declaring that Defendants' actions violate the law;

17 c. Awards to Plaintiffs and Class members treble to the amount of damages actually
18 sustained by reason of Defendants' unlawful actions alleged herein, plus the reasonable costs of
19 this Action, including, without limitation, attorneys' fees and litigation costs and expenses, and
20 pre- and post-judgment interest;

21 d. Orders of such declarative, injunctive, and equitable relief as are necessary to
22 correct the unlawful market effects caused by Defendants' conduct; and

23 e. Awards of such other relief that the Court deems just, reasonable, and appropriate.

24 **JURY DEMAND**

25 Plaintiffs demand a trial by jury on all issues so triable.

Dated: January 2, 2024

/s/ Mario Simonyan

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